

35

Hose & Couplings

Rubber Hose/P.V.C. Hose  P. 35-1 ~ 8	Hose Nozzles  P. 35-8
Hose Couplings  P. 35-8 ~ 11	Couplers  P. 35-11 ~ 14
Hose Couplings  P. 35-14 ~ 19	Quick Disconnect Couplings  P. 35-19 ~ 21

Rubber Air Hose

Molded & Braided Construction

Manguera de Goma para Aire Construcción: Moldeada y Trenzada
エアホース 橡皮空气管

Black, corrugated or smooth surface, molded and braided construction, for general service.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Pressure kgf/cm²	Mtr Per Coil	Unit Per Mtr.	
		I.D.	O.D.				I.D.	O.D.
35 01 01	6	6.3	14.5	2B	15	100		
	02	9	9.5		"	"		
	03	12	12.7		24.0	"		
	04	15	15.9		27.5	"		
	05	19	19.0		30.5	"		
35 01 06	25	25.4	38.0	3B	"	"		
	07	32	31.8		47.0	7		
	08	38	38.1		53.5	"		
	09	50	50.8		71.0	"		50

Rubber Oxygen Hose

Molded & Braided Construction

Manguera de Goma para Oxígeno Construcción: Moldeada y Trenzada
酸素ホース 橡皮氧气管

For oxygen welding equipment. Lightweight, extremely flexible, and practically non-kinkable. Furnished in blue colour to distinguish oxygen lines from acetylene lines.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Pressure kgf/cm²	Mtr Per Coil	Unit Per Mtr.	
		I.D.	O.D.				I.D.	O.D.
35 01 16	6	6.5	15.5	2B	15	200		
	8	7.9	16.5		"	"		
	9	9.5	18.0		"	"		

Rubber Acetylene Hose

Molded & Braided Construction

Manguera de Goma para Acetileno Construcción: Moldeada y Trenzada
アセチレンホース 橡皮乙炔管

For acetylene welding equipment. Lightweight, extremely flexible, and practically non-kinkable. Furnished in red colour to be distinguished as an acetylene line.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Pressure kgf/cm²	Mtr Per Coil	Unit Per Mtr.	
		I.D.	O.D.				I.D.	O.D.
35 01 21	6	6.3	13.5	1B	3	200		
	8	7.9	15.0		"	"		
	9	9.5	16.5		"	"		

Rubber Twin Welding Hose

Molded & Braided Construction

Manguera Doble de Goma para Soldadura Construcción:

Moldeada y Trenzada

溶接用ツインホース 橡皮气焊管

One piece, two-line welding hose, securely joined together to prevent tangling and increase flexibility. One line is red and the other is blue to



facilitate the welding operation. Usually supplied in 100 mtr coils. This hose is lightweight and easy to move about reducing operator fatigue to a minimum.

CODE	Nominal Size mm	Actual Size mm				Braid	Unit Per Mtr.		
		OX		AC			OX	AC	
		I.D.	O.D.	I.D.	O.D.				
35 01 26	6 x 9	6.8	13.8	9.5	16.3	1	20	5	
	8 x 8	7.9	14.9	7.9	14.7	"	"	"	
	8 x 9	"	"	9.5	16.3	"	"	"	

Corrugated Water Rubber Hose

Manguera Corrugada de Goma para Agua
筋入りウォーターホース 波纹橡皮水管

A popular type of hose for industrial use in plants, and refineries, for construction and general service. Both the inner and outer covers are flexible and rigid in construction and resistant to abrasion, pressure, and general wear.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Pressure kgf/cm²	Weight Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.	
		I.D.	O.D.					I.D.	O.D.
35 01 41	12	12.7	20.5	2	5	280	100		
	15	15.9	24.0		"	360	"		
	19	19.0	27.5		"	440	"		
	25	25.4	35.0		"	650	"		
	32	31.8	44.5		"	1,190	"		
35 01 46	38	38.1	51.5	"	"	1,460	"		
	50	50.8	67.0		"	2,300	50		

Water Rubber Hose

Wrapped & Fabric Construction

Manguera Corrugada de Goma para Agua / Construcción: Entre-tejida
布巻ウォーターホース 夹布橡皮水管

A high quality hose designed to withstand being dragged over any surface. It is also resistant to deterioration from weather and sunlight. Provided with an extra heavy tube cover and cotton duck carcass. Recommended for high pressure service. Furnished in standard lengths of 20 mtr.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Pressure kgf/cm²	Weight Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.	
		I.D.	O.D.					I.D.	O.D.
35 01 51	12	12.7	20.5	2	5	330	20		
	15	15.9	24.5		"	420	"		
	19	19.0	28.0		"	530	"		
	22	22.0	32.0		"	680	"		
	25	25.4	35.5		4	760	"		
35 01 56	32	31.8	43.0	"	"	1,060	"		
	35	35.0	47.0		"	1,260	"		
	38	38.1	50.0		"	1,360	"		
	45	44.5	58.5		"	1,810	"		

P. V. C. Water Suction/Delivery Hose

Plastic Coil Reinforced

Manguera de P.V.C. para Succión y Distribución de Agua Reforzada con Bobina de Plástico

ウォーターデリバリー、サクションホース P. V. C. 排水吸水管

Made of P. V. C. smooth inner and outer surface. The extreme clarity makes it most suitable for application where visibility of flow is an important requirement. Easy to handle and carry. Designed for both suction and delivery uses, but more suitable for delivery. The plastic coil reinforcement gives it durable strength.



CODE	Nominal Size mm	Actual Size mm		Working Pressure kgf/cm²	Weight Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.
		I.D.	O.D.				
35 01 71	25	25.0	30.0	6.0	270	50	
72	32	32.0	37.0	6.0	360	"	
73	38	38.0	43.6	4.5	480	"	
74	50	50.8	57.8	4.0	820	"	
75	65	63.5	72.0	3.5	1,180	20	
35 01 76	75	76.2	85.0	3.5	1,440	"	
77	100	101.2	113.1	3.5	2,550	"	
78	125	127.0	139.0	3.0	3,250	"	
79	150	152.4	166.0	2.5	4,250	"	

Water Discharge Hose

P. V. C. Synthetic Fiber Braided

Manguera de Descarga / Fibra Sintética Trenzada de P.V.C.

ビニール化繊排水ホース P. V. C. 化学纤维管

P. V. C. and synthetic fibers do not rust, corrode or require cathodic protection. Soft pliable, rolls up easily, requires minimum storage space. Tough, puncture proof, long service life.



Caution:

- Transferring of paint, thinner, ethylene, gasoline, alcohol and similar chemical substances is not advisable.
- Do not use near nails, glass or other pointed objects.

Test Results

Flexibility:	Scott Type Flexibility Tests Operating load x 1,000 cycles No change				
Resistance to High Temperature:	800°C x 168 hrs. No sticking				
Resistance to Low Temperature:	-40°C x 168 hrs. No cracking				
Resistance to Weathering:	800 hrs. by Sunshine-Weather-O-Meter exposure: No change				
Water Absorbency:	Less than 0.9%				
Unit Per Mtr.					
CODE	Nominal Size mm	Inside Diam mm	Wall Thickness mm	Pressure kgf/cm²	
Standard Type					
35 01 81	40	40	1.35	5.0	15.0
82	50	52	1.40	4.5	13.5
83	65	65	1.70	4.0	12.0
84	75	77	1.80	4.0	12.0
85	100	103	2.00	4.0	12.0
35 01 86	125	128	2.00	3.0	9.0
87	150	153	2.10	3.0	9.0
88	200	200	2.40	3.0	9.0
Heavy Duty Type					
35 01 91	40	40.0	1.8	10.5	31.5
92	50	52.5	2.0	10.5	31.5
93	65	66.0	2.1	10.5	31.5
94	75	78.5	2.1	9.0	27.0
95	100	104.0	2.5	9.0	27.0
35 01 96	150	155.0	2.7	7.0	21.0

P. V. C. Hose, Cloth Insertion

Manguera de P.V.C., Inserción de Tela

ビニール布入ホース P. V. C. 夹布管



Braided cotton fabric layered between the inner and outer vinyl covers for reinforcement. Furnished in 50 mtr coils.

CODE	Nominal Size mm	Actual Size mm		Working Pressure kgf/cm²	Mtr Per Coil	Unit Per Mtr.
		I.D.	O.D.			
35 02 01	15	15.0	22.0	10	50	
02	19	19.0	27.0	"	"	
03	25	25.0	33.0	7	"	

P. V. C. Domestic Hose

Manguera Doméstica de P.V.C.

家庭用ビニールホース P. V. C. 普通水管



Used for domestic general purpose. Available in blue, yellow or transparent colour. Fixed length is 50 mtrs.

35 02 06	P.V.C. domestic hose, I.D. 15×O.D. 19 mm	Mtr "
07	P.V.C. domestic hose, I.D. 18×O.D. 22 mm	

Plastic Transparent Hose

Manguera Transparente de Plástico

プラスチック透明ホース 塑胶透明水管



The extreme clarity makes it most suitable for application where visibility of flow is an important requirement. It can be easily flushed clean. It is resistant to sunlight and abrasion and is easy to handle. The hose can be twisted or knotted without any damage.

CODE	Size		Mtr Per Coil	CODE	Size		Mtr Per Coil
	I.D. mm	O.D. mm			I.D. mm	O.D. mm	
35 02 11	2	4	100	35 02 31	14	17	50
12	3	5	"	32	15	18	"
13	4	6	"	33	16	19	"
14	4	7	"	34	19	23	"
15	5	7	"	35	22	26	"
35 02 16	5	8	100	35 02 36	25	29	50
17	6	8	"	37	25	30	"
18	6	9	"	38	30	36	"
19	7	9	"	39	32	38	"
20	7	10	"	40	38	44	"
35 02 21	8	10	100	35 02 41	50	58	50
22	8	11	"	42	63	73	30
23	8	12	"	43	75	86	"
35 02 26	10	12	100				
27	10	13	"				
28	10	14	"				
29	12	14	50				
30	12	15	"				

Steam Rubber Hose

Wrapped & Fabric Construction

Manguera de Goma para Vapor / Construida : Entre-tejida

スチームホース 橡皮蒸汽管

A high-quality hose well balanced in construction for its purpose. A heavy gauge tube of heat resistant compounds covered by cotton ducks and insulated to withstand extreme heat, etc. Made in 20 mtrs in length.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Pressure kgf/cm²	Mtr Per Coil	Unit Per Mtr.
		I.D.	O.D.				
35 02 51	12	12.7	24.9	4	4	140	
	52	15	28.1	4	4	"	
	53	19	33.0	5	4	"	
	54	25	41.4	5	4	"	
	55	32	49.6	6	3	"	
35 02 56	38	38.1	58.5	8	3	140	
	57	45	66.9	8	3	"	
	58	50	75.2	8	3	"	
	59	75	93.0	8	7 bar	170	

Rubber Chemical Transfer Hose

Manguera de Goma para trasvases de Producots Químicos

ケミカルホース 橡皮化学品运输管

Made of chemical resistant rubber reinforced by wrapped fabric plies. Used for delivery service of acid, alkalis and corrosive chemical liquid.



CODE	Nominal I.D. mm	Approx. O.D. mm	Weight Per Mtr kg	Working Pressure	Unit Per Mtr.	
35 02 71	19	30	0.6	5 kgf/cm²		
	25	37	0.7	"		
	32	44	0.9	"		
	38	51	1.3	"		
	45	59	1.5	"		
35 02 76	50	66	1.8	5 kgf/cm²		
	55	74	2.2	"		
	65	80	2.6	"		
	75	98	3.8	"		

P. V. C. Air Duct Hose

Manguera de P.V.C. para Ventilación

ビニールダクトホース P. V. C. 空气管

Increased flow capacity with smooth inner surface. Highly flexible and lightweight due to P. V. C. material. Suitable for a variety of uses from ventilation to dust collection. Also suitable for transport of powder and granule.



CODE	Nominal Size mm	Actual Size mm		Working Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.
		I.D.	O.D.			
35 03 01	32	32.4	38.6	210	50	
	02	38	44.5	280	"	
	03	50	60.8	440	30	
	04	65	72.6	650	"	
	05	75	76.4	750	"	
35 03 06	90	88.9	100.1	890	"	
	07	100	101.6	930	"	
	08	125	125.9	1,390	20	
	09	150	152.4	1,658	"	
	10	200	203.7	2,171	2,510	"

P.V.C. Tetoron Reinforced Hose

Manguera de P.V.C. Reforzada con Teflón

テトロンプレードビニール工業用ホース P. V. C. 増強管

The flexible, transparent, smooth internal surface of this hose lessens fluid-resistance. For use on various machine tools, and the transport of chemicals.



Recommended for use with moderate temperatures, up to 65°C.

Unit Per Mtr.

CODE	Nominal I.D. mm	Actual O.D. mm	Working Pressure kgf/cm²	Weight Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.	
35 03 21	4	9	16	70	100		
	22	6	16	90	"		
	23	8	13.5	120	"		
	24	9	15	150	"		
	25	10	16	160	"		
35 03 26	12	18	10	185	"		
	27	15	22	265	50		
	28	19	26	325	"		
	29	25	33	475	"		
	30	32	41	670	40		
35 03 31	38	48	7	875	"		
	32	50	62	1,360	"		
	33	63	80	2,250	20		
	34	75	92	2,980	"		

P. V. C. Steel Coil Reinforced Hose

Manguera de P.V.C. Reforzada con

Alambre de Acero

スチールコイルビニール工業用ホース

P. V. C. 钢丝增强管



Features : Ample flexibility. High external pressure resistance. Good transparency and smooth internal surface.

Application : As an oil hose for machine tools, or as a pressure pipe or suction pipe for various pulverized materials. Recommended for use in moderate temperatures of up to 65°C.

Unit Per Mtr.

CODE	Nominal I.D. mm	Actual O.D. mm	Working Pressure kgf/cm²	Weight Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.	
35 03 51	4	9	15	70	50		
	6	11	15	90	"		
	8	13.5	13	120	"		
	9	15	13	150	"		
	10	16	10	160	"		
35 03 56	12	18	10	185	50		
	15	22	7	265	"		
	19	26	7	325	"		
	25	33	6	475	"		
	32	41	6	670	40		
35 03 61	38	48	6	875	"		
	50	62	5	1,360	"		
	63	80	5	2,250	20		
	75	92	3	2,980	"		

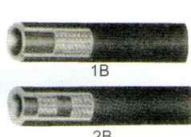
Rubber Hydraulic Hose

Reinforced with Synthetic Fiber

Manguera Hidráulica de Goma Reforzada con Fibra Sintética

作動油用ホース(低・中圧用) 橡皮油压管

For use with hydraulic machines of low or medium pressure. Made of oil resistant rubber reinforced by synthetic fiber. Recommended oil temperature is from -30°C up to 88°C.



CODE	Nominal Size mm	Actual Size mm		Braid	Working Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.
		I.D.	O.D.				

Working Pressure 15 kgf/cm²

35 04 01	6	6.3	12.3	1B	130	100
02	9	9.5	15.9	"	175	"
03	12	12.7	19.7	"	250	"
04	19	19.0	30.0	"	585	"
05	25	25.4	37.0	"	785	"
35 04 06	32	31.8	44.8	2B	1,075	"
07	38	38.1	51.1	"	1,230	"
08	50	50.8	65.4	"	1,720	50

Working Pressure 35 kgf/cm²

35 04 11	6	6.3	13.0	1B	140	100
12	9	9.5	16.5	"	195	"
13	12	12.7	20.3	"	275	"
14	19	19.0	32.6	2B	755	"
15	25	25.4	39.2	"	960	"
35 04 16	32	31.8	46.0	"	1,100	20
17	38	38.1	52.3	"	1,320	"
18	50	50.8	66.2	"	1,905	"

Rubber Oil Delivery Hose**Reinforced with Synthetic Textile Cord**

Manguera de Goma Descarga de Aceite Reforzada con Cordón Textil Sintético 油用ホース 橡皮輸油管

Used for delivery service of fuel oils, gasoline, diesel oils and other petroleum oils. Made of oil resistant rubber reinforced with strong synthetic textile cords.



Unit Per Mtr.

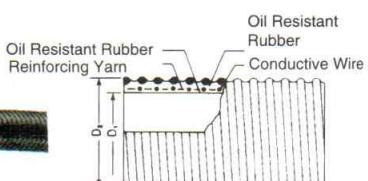
CODE	Nominal I.D. mm	Approx. O.D. mm	Weight Per Mtr kg	Pressure Rating
35 04 26	6	14.3	0.178	20 bar
27	8	15.9	0.235	"
28	9.5	17.5	0.227	15 bar
29	12.5	21.5	0.350	"
30	16	24.7	0.480	"
35 04 31	19	28	0.4	10 kgf/cm ²
32	25	35	0.6	"
33	32	42	0.8	"
34	38	49	0.9	"
35	45	56	1.2	"
35 04 36	50	62	1.9	10 kgf/cm ²

Rubber Oil Suction & Delivery Hose**Reinforced with Yarn & Electro Conductive Wire**

Manguera de Goma para Succión y Distribución de Aceite Reforzada con Hikado Alambre Conductivo Eléctrico

大口径油用ホース 橡皮大口径管

Made of oil resistant rubber together with reinforcing yarn and electro conductive wire. Used for conveyance of crude oil, heavy oil, gasoline, etc.



CODE	Nominal Size mm	Actual Size mm		Working Pressure kgf/cm ²	Weight Per Mtr grm.	Unit Per Mtr.
		I.D.	O.D.			
35 04 41	75	76.2	98.2	7	2,520	
42	100	101.6	129	"	4,100	
43	125	125.9	155	"	5,460	
44	150	151.0	183	"	7,350	
45	200	203.0	244	"	12,600	

P. V. C. Abrasion Resistant Hose

Manguera Resistente a la Abrasión de P.V.C.

耐摩耗用ホース P. V. C 耐摩用管



CODE	Nominal Size mm	Actual Size mm		Weight Per Mtr grm.	Mtr Per Coil	Unit Per Mtr.
		I.D.	O.D.			
35 04 51	38	38.0	46.2	490	50	
52	50	50.6	59.8	840	"	
53	65	62.4	73.0	1,060	20	
54	75	76.4	88.8	1,520	"	
55	90	88.9	104.3	1,900	"	
35 04 56	100	101.6	117.6	2,330	"	
57	125	125.9	142.9	3,360	"	
58	150	152.4	171.0	4,570	"	

Large Bore Hose**for General Chemical and Petroleum Cargo Use**

Manguera de Gran Diámetro para Usos de Sustancias Químicas y de Petróleo

ケミカル・油用大口径ホース 原油用大口径管

Heavy duty, composite hoses for ship to shore, dockside and general shipboard use. Works in compliance with international standards including IMO standards, BS 5842 and US Coast Guard regulations. Made of polypropylene fabric and films with a weatherproof and abrasion resistant outer cover reinforced with internal and external wire spirals which are electrically bonded to the end connections giving full end-to-end electrical continuity for safety from static discharge.

Suitable for carrying a wide range of aggressive chemicals which require inert materials and can handle cargoes which involve factors of pressure and temperature with cryogenics such as LPG and LNG.

- Liquid and vapor hoses should be compatible with the cargo and suitable to the cargo temperature.
- Hoses subject to tank pressure or discharge pressure of pumps should be designed for a bursting pressure not less than 5 times the maximum pressure the hose will be subjected to during cargo transfer.

**For Petroleum Use
(In compliance with IMO standard)****How to order: CODE**

Hose for petroleum use, DIAM x LENGTH

CODE	35 04 71	35 04 72	35 04 73	Unit Per C/L
Nominal Size	4"	6"	8"	
Working Pressure		10.5 kgf/cm ²		
Working Temperature		-26°C ~ +82°C		
Minimum Bend Radius mm	400	500	740	
Standard Length mtr	18	18	15	
Weight kg/mtr	6.5	11.0	15.0	

**For Hazardous and Corrosive Chemical Use
(In compliance with IMO standard)**

How to order: CODE

Hose for hazardous and chemical use, KIND OF CHEMICAL,
DIAM X LENGTH

CODE	35 04 76	35 04 77	35 04 78	Unit Per C/L
Nominal Size	4"	6"	8"	
Working Pressure		10.5 kgf/cm ²		
Working Temperature		-25°C ~ +60°C		
Minimum Bend Radius mm	400	500	740	
Standard Length mtr	18	18	15	
Weight kg/mtr	6.5	11.0	15.0	

Note: When ordering, please specify what kind of chemical or material the hose will be used with.

Suction and Discharge Hose (Built in Fitting)

Manguera para Succión y Descarga

バンドレスホース 吸入及排放软管（内置于附件）

Designed for suction and discharge of air, water, oil, abrasion, chemical, heavy acid, etc. at working pressure of 100 psi, 150 psi, 200 psi, and 300 psi. These hoses are factory coupled, and there is no hose band used. Neither leakage nor flange separation will occur.



The hose details as to construction, flange, and usage are described as follows.

Hose Application & Size Table

W.P. S & D HOSE	100 psi	150 psi	200 psi	300 psi	FLUIDS CARRIED
AIR	1"~ 20" (25A~ 500A)		1"~ 12" (25A~ 300A)		Compression Air, etc.
WATER	1"~ 20"		1"~ 12""		Cooling Water, Sea Water, etc.
OIL	1"~ 20"		1"~ 12"		Crude Oil, Heavy Oil, Kerosene, etc.
ABRASION	1"~ 20"		1"~ 12"		Cement, Sand, etc.
CHEMICAL	1"~ 20"		1"~ 12"		Caustic Soda, etc.
HEAVY ACID	1"~ 8" (25A~ 500A)				Hydrochloric Acid, Sulfuric Acid, etc.

Details of Built-in Fittings for Hose End

Type A	Built-in Nipple Type (Example...Air, Water, Oil, etc.)
Type B	Rubber Lining Type (Example...Water, Abrasion, Chemical, Heavy Acid, etc.)
Type C	Lap Joint Flange Type (Example...Air, Water, Oil, etc.)
Type D	Split Ring Flange Type (Example...Abrasion, Chemical, Heavy Acid, etc.)

Fittings: According to customer's requirements.

Hose Specification

Reinforcement	Synthetic cord fabric plies and helical hard steel wire reinforced
Colour	Black
Maximum Length	Over 1' thru 14'65" (20 mtrs) Over 16' thru 20'20" (6 mtrs)
Remark	The Hose for Rubber Lining Type (B) has Flat Face Flange

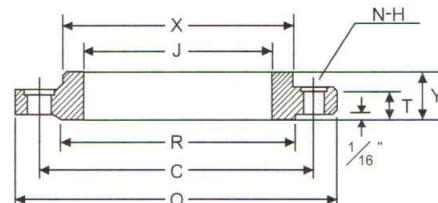
Hose Composition Material

Material S&D HOSE	Tube	Cover
AIR	Natural rubber	Synthetic rubber, resistance to weathering
WATER	Natural rubber	
OIL	Synthetic rubber, resistance to oil	
ABRASION	Synthetic rubber, resistance to abrasion	
CHEMICAL	Synthetic rubber, resistance to acid	
HEAVY ACID	Special compounded synthetic rubber, resistance to heavy acid	

The following tables are provided to assist you in determining the proper flanges and hoses for safe use at high temperatures and pressures, or when conveying chemicals or toxic material.

Details of Hose Flange Applied

Details of the Flange used for these hoses are as follows:
ANSI B 16.5 Forged Flange Slip on Type.



Class 150 lb

Nominal Pipe Size	Outside Dia. 0	Thickness C	Diameter of Hub X	Length Through Hub Y	Bore B	Diameter of Bolt Circles	Diameter of Bolt Holes	Number of Bolts	Diameter of Bolt
2	6	0.75	3.06	1.00	2.44	4.75	0.75	4	5/8
2-1/2	7	0.88	3.56	1.12	2.94	5.50	0.75	4	5/8
3	7.5	0.94	4.25	1.19	3.57	6.00	0.75	4	5/8
3-1/2	8.5	0.94	4.81	1.25	4.07	7.00	0.75	8	5/8
4	9	0.94	5.31	1.31	4.57	7.50	0.75	8	5/8
5	10	0.94	6.44	1.44	5.66	8.50	0.88	8	3/4
6	11	1.00	7.56	1.56	6.72	9.50	0.88	8	3/4
8	13.5	1.12	9.69	1.75	8.72	11.75	0.88	8	3/4
10	16	1.19	12.00	1.94	10.88	14.25	1.00	12	7/8
12	19	1.25	14.38	2.10	12.88	17.00	1.00	12	7/8
14	21	1.38	15.75	2.25	14.14	18.75	1.12	12	1

Various Specifications of Hoses

and Applications for the Fluids carried

Diversas especificaciones de mangueras y aplicaciones para los fluidos transportados

様々な仕様のホースと流体用途

各種規格的軟管 流体软管的各种規格和应用

1. Air & Water Suction & Discharge Hose

SPECIFICATIONS

Working Temperature Range: -4°F ~ +140°C (-20°C ~ +60°C)

W.P.	150 psi (10 kgf/cm²)					
	Item	I.D.	Approx. O.D.		Approx. Weight	Min. Bend Radius
			(mm)	(in)	(mm)	(kg/m)
2	50.8	2-11/16	68	2.2	1.5	450
2-1/2	63.5	3-7/32	82	3.1	2.1	600
3	76.2	3-11/16	94	3.7	2.5	700
3-1/2	88.9	4-9/32	109	4.9	3.3	800
4	101.6	4-7/8	124	6.2	4.2	900
5	127	6	152	9.0	6.0	1,200
6	152.4	7-5/32	182	13.2	8.8	1,400
8	200	9-7/32	234	20.5	13.7	1,800
10	248	11-5/16	287	30.2	20.2	2,300
12	298	13-1/2	343	40.8	27.3	2,700
14	356	16	406	55.2	37.0	3,200

2. Oil Suction & Discharge Hose

SPECIFICATIONS

Working Temperature Range: -4°F ~ +176°C (-20°C ~ +80°C)

W.P.	150 psi (10 kgf/cm²)					
	Item	I.D.	Approx. O.D.		Approx. Weight	Min. Bend Radius
			(mm)	(in)	(mm)	(kg/m)
2	50.8	2-11/16	68	2.3	1.5	450
2-1/2	63.5	3-7/32	82	3.2	2.1	600
3	76.2	3-3/4	95	3.8	2.5	700
3-1/2	88.9	4-5/16	110	5.2	3.5	800
4	101.6	4-31/32	126	6.7	4.5	900
5	127	6-1/32	153	9.3	6.2	1,200
6	152.4	7-5/32	182	13.4	9.0	1,400
8	200	9-9/32	236	21.4	14.3	1,800
10	248	11-13/32	290	30.3	20.3	2,300
12	298	13-5/8	346	42.6	28.5	2,700
14	356	16-3/32	409	57.3	38.4	3,200

3. Abrasion Materials Suction & Discharge Hose

SPECIFICATIONS

Working Temperture Range: -4°F ~ +176°C (-20°C ~ +80°C)

W.P.	150 psi (10 kgf/cm²)					
	Item	I.D.	Approx. O.D.		Approx. Weight	Min. Bend Radius
			Nominal Size (in)	(mm)	(in)	(mm)
2	50.8	2-25/32	71	2.7	1.8	550
2-1/2	63.5	3-11/32	85	3.6	2.4	700
3	76.2	3-29/32	99	4.4	2.9	900
3-1/2	88.9	4-1/2	114	5.9	4.0	1,000
4	101.6	5-5/32	131	7.7	5.2	1,100
5	127	6-7/32	158	10.6	7.1	1,400
6	152.4	7-3/8	187	14.9	10.0	1,700
8	200	9-1/2	241	23.4	15.7	2,200
10	248	11-5/8	295	32.8	22.0	2,800
12	298	13-27/32	352	46.0	30.8	3,300
14	356	16-3/8	416	62.1	41.6	3,900

4. Chemical Suction & Discharge Hose

SPECIFICATIONS

Working Temperture Range: -4°F ~ +140°C (-20°C ~ +60°C)

W.P.	150 psi (10 kgf/cm²)					
	Item	I.D.	Approx. O.D.		Approx. Weight	Min. Bend Radius
			Nominal Size (in)	(mm)	(in)	(mm)
2	50.8	2-11/16	68	2.3	1.5	450
2-1/2	63.5	3-7/32	82	3.2	2.1	600
3	76.2	3-3/4	95	3.8	2.5	700
3-1/2	88.9	4-5/16	110	5.2	3.5	800
4	101.6	4-31/32	126	6.7	4.5	900
5	127	6-1/32	153	9.3	6.2	1,200
6	152.4	7-5/32	182	13.4	9.0	1,400
8	200	9-9/32	236	21.4	14.3	1,800
10	248	11-13/32	290	30.3	20.3	2,300
12	298	13-5/8	346	42.6	28.5	2,700
14	356	16-3/32	409	57.3	38.4	3,200

5. Heavy Acid Suction & Discharge Hose

SPECIFICATIONS

Working Temperture Range: -4°F ~ +122°C (-20°C ~ +50°C)

W.P.	150 psi (10 kgf/cm²)					
	Item	I.D.	Approx. O.D.		Approx. Weight	Min. Bend Radius
			Nominal Size (in)	(mm)	(in)	(mm)
2	50.8	2-29/32	74	2.6	1.7	600
2-1/2	63.5	3-15/32	88	3.9	2.6	800
3	76.2	4	102	4.3	2.9	1,000

(to be continued)

W.P.		150 psi (10 kgf/cm ²)					
Item	I.D.	Approx. O.D.		Approx. Weight		Min. Bend Radius	
Nominal Size (in)	(mm)	(in)	(mm)	(kg/m)	(lbs/ft)	(mm)	(ft)
3-1/2	88.9	4-19/32	117	5.9	4.0	1,100	3.7
4	101.6	5-1/4	133	7.3	4.9	1,200	4.0
5	127.0	6-5/16	160	9.8	6.6	1,500	5.0
6	152.4	7-7/16	189	13.9	9.3	1,800	6.0
8	200.0	9-9/16	243	22.2	14.9	2,400	8.0

Guide of How to Order

Above hoses are described only just for your reference and not coded, but when ordering, please specify exactly the following matters.

CODE	35 - 05 - 01
Fluid Carried	Air, Water, Oil Abrasion Chemical, Heavy Acid
x	
Nominal Size	1" ~ 20"
x	
Working Pressure	100 psi, 150 psi
x	
Hose End Fitting & Flange Type	Built-in Nipple Rubber Lining Type & Lap Joint Flange
x	
Working Temperature	-20°C ~ +60°C
x	
Length of Unit	20 Mtrs (1" ~ 14") 6 Mtrs (16" ~ 20")

Reels with Hose

for Petroleum/Grease/Air/Water

Rollos de mangueras para petróleo/grasa/aire
油・グリース・エア用リール付きホース
配有卷盘的油、润滑脂、空气用软管

Increased frame strength in a single pedestal, composite spool option. Improved spring makes it easy to pull out the last 10 feet. Full-flow swivel maximizes material flow with minimal pressure drop. Larger hose capacity (30 - 60 foot, 10 - 20 meters) with smaller profile to fit into tight spaces. Improved latch design prevents lockout and simplifies repositioning the arm.



SD Series

Compact design easily fits in small spaces. Steel spool stands up to demanding use and applications. Can be used either as an open or enclosed reel. Flexible positioning of the guide arm for mounting on bench or ceiling, wall or utility truck. Structurally reinforced frame made from high strength steel won't bend or flex. Baked-on enamel finish protects reel from corrosion for longer life. Now available in six colours (Metallic Blue, White, Red, Black, Dark Blue, or Yellow), but Metallic Blue is supplied unless any colour is not indicated in your order.

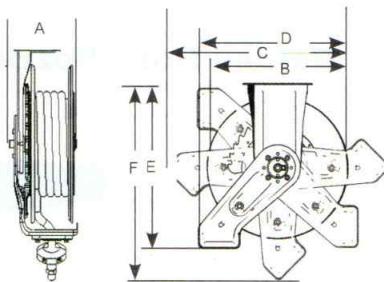
Steel Spool Hose Reels

Designed for daily use applications. Long-lasting spring

provides constant spring torque through the entire range of motion. Open swivel ports ensure high fluid flow with minimal pressure loss. Enclosure kits available-ideal when appearance and protection is important.

Dimensions

Size 10		Size 20	
A	7.0" (177 mm)	A	7.0" (177 mm)
B	16.2" (412 mm)	B	18.1" (460 mm)
C	21.0" (533 mm)	C	23.4" (594 mm)
D	17.1" (435 mm)	D	19.2" (488 mm)
E	19.5" (495 mm)	E	21.8" (554 mm)
F	22.5" (571 mm)	F	25.2" (640 mm)



Specifications

Model	Size	Pressure psi (bar)	Hose		Connection Size	
			ID	Length ft (mtr)	Inlet npsm (m)	Outlet npt (m)
Air, Water, Anti-freeze, Windshield Washer Fluid						
HPL 23B	10		3/8"	35 (11)		3/8
HPL 25B		300 (20.7)	3/8"	50 (15)	1/2	3/8
HPL 33B			1/2"	35 (11)		1/2
HPL 65B	20		1/2"	50 (15)		1/2

Petroleum or Synthetic based Oils

HPM 33B	10	2,000 (138)	1/2"	35 (11)	1/2	1/2
HPM 65B	20			50 (15)		

Grease

HPH 15B	10	5,000 (345)	1/4"	50 (11)	3/8	1/4
HPH 23B		4,000 (276)	3/8"	35 (11)		
HPH 55B	20	4,000 (276)	3/8"	50 (15)		

CODE	Model	Size	CODE	Model	Size	Unit Per P.C.
35 06 31	HPL 23B	10	35 06 36	HPM 33B	10	
32	HPL 25B		38	HPM 65B	20	
33	HPL 33B		41	HPH 15B	10	
35	HPL 65B	20	43	HPH 23B	10	
			44	HPH 55B	20	

Name of Mfr.: Graco Inc.

Oxygen & Acetylene Gas Hose Reels

Enrolladores de manguera para oxígeno y acetileno
酸素・アセチレンガスホースリール
氧气和乙炔气体软管卷盘

Safely transports oxygen and acetylene gases for both welding and cutting applications from the cylinders to the working place. The hose serves as a flexible conduit, connecting

the gas supply to the torch or welding equipment. It is designed to withstand the high pressure and specific requirements of oxygen and acetylene gases, ensuring a reliable and controlled flow. Safety features are incorporated into the hose design to prevent leaks and maintain the integrity of the gas supply.



Unit Per Set

CODE	Hose Length	Dimension W × D × H (mm)	Weight (kg)
35 06 45	10 mtr		8.5
46	20 mtr	330 × 370 × 380	10.9
47	30 mtr		13.3

Plastic Garden Hose Nozzles

Lanza de Plástico para Manguera de Jardín
ガーデンホース用プラスチックノズル 水管喷嘴

Combination nozzle designed for spray or straight delivery by simply adjusting a round screw. Hose end is available in 15 mm size only.



35 10 01	Nozzle, garden hose, plastic hose end 15 mm	Pc.
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Cast Aluminium Garden Hose Nozzles with Spray

Boquillas de Aluminio para Lanzas de Manguera von Rociador
アルミ铸物ホースノズル 铝铸水管喷嘴

Made of cast aluminium. Spray flow can be adjusted by turning the nozzle. Two types of nozzles are available: a 9 - 15 mm adjustable hose end and a 25 mm fixed end.



35 10 04	Hose nozzle, adjustable, 9 mm and 15 mm hose end	Pc.
05	" fixed, 25 mm hose end	

Pistol Grip Hose Nozzles

Lanza Pistola レバースプレー 手枪式水管喷嘴

Brass made and finished with chrome. Furnished with variable spray flow squeeze lever. Nozzle available in 15 mm dia. only.



35 10 08	Nozzle hose, pistol grip, 15 mm hose end	Pc.
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Garden Hose Couplings

Acoplamientos para mangueras jardín
ガーデンホース継ぎ手 花园软水管接头



35 09 01/02	35 09 03	35 09 04	35 09 05	35 09 06
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35 09 07	35 09 08	35 09 09	35 09 11
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CODE	Size	Material	Type	Alligator No.
Hose Couplings				

35 09 01	13 mm	PVC	Gardena	SM21010
02	16/19 mm			SM21015
03	13 mm Waterstop			SM21040

Tap Connectors				
Unit Per Pc.				

35 09 04	3/4" female thread	PVC	Gardena	SM21025
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Male Couplings				
Unit Per Pc.				

35 09 05	3/4"	PVC	Gardena	SM21035
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Nozzles				
Unit Per Pc.				

35 09 06	1/2"	PVC	Gardena	SM21050
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Hose Connectors				
Unit Per Pc.				

35 09 07	Hose end: 2 × 13 mm	PVC	Gardena	SM21060
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Connections				
Unit Per Pc.				

35 09 08	1/2"	PVC	Gardena	SM21070
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Nozzle Pistol Grip				
Unit Per Pc.				

35 09 09	1/2"	PVC	Gardena	SM21052
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Hose Saddles				
Unit Per Pc.				

35 09 10	-	PVC	Gardena	SM21090
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Nozzle Short				
Unit Per Pc.				

35 09 11	38 mm	Brass	-	ST95138
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Lock Type Air Hose Couplings

Racores de Manguera de Aire
ロック式エアホース継手 锁扣式空气管接头

The quick lock coupling feature makes it especially efficient and economical for every kind of air and pneumatic service. Press the two fittings together, give a quarter turn to one, and the connection is made. Made of cast brass, with hose ends on both sides. Furnished in sets only.



Unit Per Set				
CODE	Hose Size		CODE	Hose Size
	Nom. mm	Inch		
35 10 11	9	3/8	35 10 13	19
12	12	1/2	14	25
				3/4
				1

Garden Hose Couplings

Acoplamientos para mangueras jardín
ガーデンホース継ぎ手 花园软水管接头

Universal Air Hose Couplings with Hose End or Thread End

Coplas de Manguera Universal para Aire con Punto para Manguera o con Punto de Rosca

ユニバーサルホース継手 万向空气管接头

Brass made couplings forming a positively locked connection that will not break or come apart in service. The locking jaws are heavy with large bulk surfaces which cannot bend or break loose. Couplings are interchangeable between various sizes and combinations according to DIN 3489. 42 mm distance between lugs.



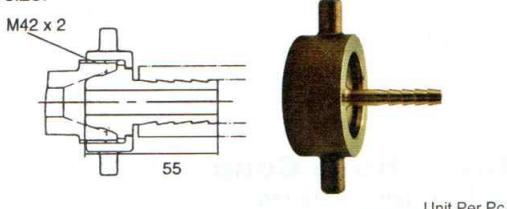
CODE	Size		Type	Unit Per Pc.
	Nom. mm	Inch		
35 10 21	9	3/8	Hose End	
22	12	1/2		
23	19	3/4		
24	25	1		
35 10 26	-	PT 3/8	Male Thread End	
27	-	PT 1/2		
28	-	PT 3/4		
29	-	PT 1		
35 10 31	-	PT 3/8	Female Thread End	
32	-	PT 1/2		
33	-	PT 3/4		
34	-	PT 1		
35 10 36	Packing for universal coupling			

Cast Bronze Air Hose Couplings M42 x 2

Acoplamientos de Bronce para Manguera de Aire

エアホースカップリング 铸铜空气管接头

Female thread connection for use with the ship's male thread air outlet. Made of cast bronze with Metric Fine Thread (JIS B 0207) of M42 x 2 for respective hose end connection thread size.



CODE	Nominal Hose End mm	Connection Thread	CODE	Nominal Hose End mm	Connection Thread	Unit Per Pc.
	M42 x 2	M42 x 2		M42 x 2		
35 10 51	6	M42 x 2	35 10 55	15	M42 x 2	
52	8	M42 x 2	56	19	M42 x 2	
53	9	M42 x 2	57	25	M42 x 2	
54	12	M42 x 2				

Caps for M42 x 2 Air Hose Coupling



35 10 58	Cap for M42 x 2 air hose coupling, bronze	Pc.
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Brass Screw Air Hose Couplings

Acoplamientos de Latón para Manguera de Aire

ネジ込みホース継手 铜螺牙式空气管接头

Brass air hose screw type couplings. Both ends are of exactly the same straight pipe thread size and cannot be connected to different diameter hoses. These couplings are furnished as a set only.



Unit Per Pr.

CODE	Nominal Hose End mm	Connection Thread	CODE	Nominal Hose End mm	Connection Thread
35 10 61	6	1/4"	35 10 64	12	1/4"
62	8	1/4"	65	19	1/4"
63	9	1/4"			

Air & Steam Hose Couplings

Acoplamientos para manguera de aire y vapor

エアー&スチーム用ホース継手 空气及蒸汽用软管接头

35 10 71-73	35 10 76/77	35 10 78
35 10 81-84	35 10 86-90	35 10 91-94

CODE	Size	Material	Type	Alligator No.
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Air Cocks Single				Unit Per Pc.
35 10 71	1/2", Lug size 42 mm			
72	3/4", Lug size 42 mm			
73	1", Lug size 42 mm	Cast iron	Thread: BSP female	SM245013 SM245019 SM245025

Air Cocks Double				Unit Per Pc.
35 10 76	3/4", Lug size 42 mm			
77	1", Lug size 42 mm	Cast iron	Thread: BSP female	SM250019 SM250025

Air Hose Couplings - 3-way				Unit Per Pc.
35 10 78	42 mm	Cast iron	-	SM260115

Air Hose Couplings				Unit Per Pc.
35 10 81	10 mm			
82	13 mm			
83	19 mm			
84	25 mm	Cast iron	USA	SM310010 SM310013 SM310019 SM310025

(to be continued)

CODE	Size	Material	Type	Alligator No.
Air Hose Adapters Unit Per Pcs.				
35 10 86	1/4"			SM315006
87	3/8"			SM315010
88	1/2"			SM315013
89	3/4"			SM315019
90	1"			SM315025
35 10 91	3/8"			SM320010
92	1/2"			SM320013
93	3/4"			SM320019
94	1"			SM320025
		Cast iron	Thread: NPT female	
			Thread: NPT male	

Air & Steam Hose Couplings

Acoplamientos para manguera de aire y vapor

エアー & スチーム用ホース継手 空气及蒸汽用软管接头



CODE	Size	Material	Type	Alligator No.
Water Hose Couplings Unit Per Pcs.				
35 11 01	10 mm			SM211010
02	13 mm			SM211013
03	16 mm			SM211016
04	19 mm			SM211019
05	25 mm			SM211025
06	32 mm			SM211032
07	38 mm			SM211038
35 11 08	1/4"			SM212010
09	3/8"			SM212013
10	1/2"			SM212016
11	3/4"			SM212019
12	1"			SM212025
13	1-1/4"			SM212032
14	1-1/2"			SM212038
		Brass	BSP female, Lug size 40 mm	

(to be continued)

CODE	Size	Material	Type	Alligator No.
35 11 15	1/4"			SM213010
16	3/8"			SM213013
17	1/2"			SM213016
18	3/4"			SM213019
19	1"			SM213025
20	1-1/4"			SM213032
21	1-1/2"			SM213038
		Brass	BSP female, Lug size 40 mm	

CODE	Size	Material	Type	Alligator No.
35 11 22	40 mm	Brass	-	SM214010

CODE	Size	Material	Type	Alligator No.

CODE	Size	Material	Type	Alligator No.
35 11 23	6 mm (8 mm)			SM230006
24	8 mm (9-1/2 mm)			SM230008
25	10 mm (12 mm)			SM230010
26	13 mm (15 mm)			SM230013
27	15 mm (17 mm)			SM230015
28	19 mm (21 mm)			SM230019
29	25 mm (27.5 mm)			SM230025
30	32 mm (34-1/2 mm)			SM230032
		Cast iron	Long size 42 mm	

CODE	Size	Material	Type	Alligator No.
35 11 31	1/4"			SM235006
32	3/8"			SM235010
33	1/2"			SM235012
34	3/4"			SM235019
35	1"			SM235025
36	1-1/4"			SM235030
		Cast iron	BSP female, Lug size 42 mm	

CODE	Size	Material	Type	Alligator No.
35 11 37	1/4"			SM240006
38	3/8"			SM240010
39	1/2"			SM240012
40	3/4"			SM240019
41	1"			SM240025
42	1-1/4"			SM240030
		Cast iron	BSP female, Lug size 42 mm	

CODE	Size	Material	Type	Alligator No.
35 11 43	42 mm	Cast iron	-	SM243110

CODE	Size	Material	Type	Alligator No.
35 11 45	19 mm		-	SM670019
46	25 mm		-	SM670025

CODE	Size	Material	Type	Alligator No.
35 11 51	19 mm			SM675019
52	25 mm			SM675025
53	32 mm			SM675030
54	38 mm			SM675040
55	50 mm			SM675050
35 11 56	19 mm			SM680019
57	25 mm			SM680025
58	32 mm			SM680030
59	38 mm			SM680040
60	50 mm			SM680050
		BSP male		
		BSP female		

Brass Hose Couplings 2/3 BSP Female Threaded

Acoplamientos hembra de latón para mangueras BSP
真鍮ホース継ぎ手 软管用铜接头



CODE	Size	Alligator No.	CODE	Size	Alligator No.
35 11 71	3/8"x 9 mm	GA200010	35 11 78	1-1/4"x32 mm	GA200032
72	1/2"x13 mm	GA200014	79	1-1/2"x32 mm	GA200038
73	3/4"x13 mm	GA200018	80	1-1/2"x38 mm	GA200040
74	3/4"x16 mm	GA200019	81	2"x50 mm	GA200050
75	3/4"x19 mm	GA200020	82	2-1/2"x63 mm	GA200065
35 11 76	1"x25 mm	GA200025	35 11 83	3"x75 mm	GA200075
77	1-1/4"x25 mm	GA200030			

Brass Hose Couplings 1/3

BSP Male Threaded

Acoplamientos hembra de latón para mangueras BSP

真鍮ホース継ぎ手 软管用铜接头



Unit Per Pcs.

CODE	Size	Alligator No.	CODE	Size	Alligator No.
35 11 86	3/8" x 9 mm	GA210010	35 11 93	1-1/4" x 32 mm	GA210032
87	1/2" x 13 mm	GA210014	94	1-1/2" x 32 mm	GA210039
88	3/4" x 13 mm	GA210018	95	1-1/2" x 38 mm	GA210041
89	3/4" x 16 mm	GA210019	96	2" x 50 mm	GA210052
90	3/4" x 19 mm	GA210020	97	2-1/2" x 63 mm	GA210065
35 11 91	1" x 25 mm	GA210026	35 11 98	3" x 75 mm	GA210075
92	1-1/4" x 25 mm	GA210030			

Quick-Connect Couplers for All Purposes

Enchufes Rapidos Multiusos 万能流体継手 快速接头

A general-purpose coupling which can close at either end of the connection. It is a convenient, compact coupling set which connects and disconnects easily, providing dependable service for fluid transfer of hydraulic, pneumatic, and vacuum systems.

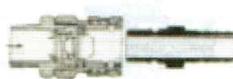
The flow side coupling has a floating ball valve which will automatically stop the flow of liquid or gas when the coupling is disconnected.

1. Single End Shut Off Coupler

Enchufes Simple 万能流体継手片路開閉型 快速接头



Connect



Disconnect

One way ball locking most ordinary type of sockets & plugs. When these sockets and plugs are disconnected, liquid or gas inside will stop flowing automatically on the socket side.

Pressure Rating & Application

Withstanding capacity of main body materials against pressure is as follows.

Material Fluid Pressure	Steel	Brass	Stainless Steel
Working pressure	1.5 MPa (15 kgf/cm ²)	1.0 MPa (10 kgf/cm ²)	1.5 MPa (15 kgf/cm ²)
Pressure resistance	2.0 MPa (20 kgf/cm ²)	1.5 MPa (15 kgf/cm ²)	2.0 MPa (20 kgf/cm ²)
Major Applicable Fluid	Air	Air, Water	Air, Water

A. Hose End Type



SH Series Socket



PH Series Plug

How to order: CODE

Coupler, quick-connect, single end shut off, MATERIAL, SOCKET or PLUG, HOSE END SIZE

Unit Per Pcs.

Hose End Size	Part No.	Steel	Brass	S. Steel
		CODE	CODE	CODE

SH Series Socket

1/4	20 SH	35 12 01	35 12 11	35 12 21
3/8	30 SH	02	12	22
1/2	40 SH	03	13	23
1/2	400 SH	35 12 04	35 12 14	35 12 24
3/4	600 SH	05	15	25
1	800 SH	06	16	26

PH Series Plug

1/4	20 PH	35 12 31	35 12 41	35 12 51
3/8	30 PH	32	42	52
1/2	40 PH	33	43	53
1/2	400 PH	35 12 34	35 12 44	35 12 54
3/4	600 PH	35	45	55
1	800 PH	36	46	56

Name of Mfr.: Nitto Kohki Co., Ltd.

B. Male Thread Type



SM Series Socket



PM Series Plug

How to order: CODE

Coupler, quick-connect, single end shut off, MATERIAL, SOCKET or PLUG, male thread end, THREAD SIZE

Unit Per Pcs.

Male Pipe Thread	Part No.	Steel	Brass	S. Steel
		CODE	CODE	CODE

SM Series Socket

R 1/8	10 SM	35 13 01	-	-
R 1/4	20 SM	02	35 13 12	35 13 22
R 3/8	30 SM	03	13	23
R 1/2	40 SM	04	14	24
R 3/4	600 SM	08	-	-
R 1/2	400 SM	35 13 05	35 13 15	35 13 25
R 3/4	600 SM	06	16	26
R 1	800 SM	07	17	27

PM Series Plug

R 1/8	10 PM	35 13 31	35 13 41	-
R 1/4	20 PM	32	42	35 13 52
R 3/8	30 PM	33	43	53
R 1/2	40 PM	34	44	54
R 1/2	400 PM	35 13 35	35 13 45	35 13 55
R 3/4	600 PM	36	46	56
R 1	800 PM	37	47	57

Name of Mfr.: Nitto Kohki Co., Ltd.

C. Female Thread Type



SF Series Socket



PF Series Plug

How to order : CODE

Coupler, quick-connect, single end shut off, MATERIAL, SOCKET or PLUG, female thread end, THREAD SIZE

Female Pipe Thread	Part No.	Unit Per Pc.		
		Steel CODE	Brass CODE	S. Steel CODE

SF Series Socket

Rc 1/4	20 SF	35 14 01	35 14 11	35 14 21
Rc 3/8	30 SF	02	12	22
Rc 1/2	40 SF	03	13	23
Rc 1/2	400 SF	35 14 04	35 14 14	35 14 24
Rc 3/4	600 SF	05	15	25
Rc 1	800 SF	06	16	26

PF Series Plug

Rc 1/4	20 PF	35 14 31	35 14 41	35 14 51
Rc 3/8	30 PF	32	42	52
Rc 1/2	40 PF	33	43	53
Rc 1/2	400 PF	35 14 34	35 14 44	35 14 54
Rc 3/4	600 PF	35	45	55
Rc 1	800 PF	36	46	56

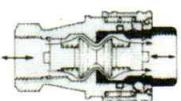
Name of Mfr.: Nitto Kohki Co., Ltd.

- Note: 1) Part Nos. 20, 30, and 40 are interchangeable.
 2) Part Nos. 400, 600 and 800 are interchangeable..
 3) Above 1) and 2) can not be connected across each group due to the difference of the coupling body size.

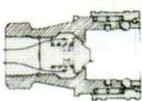
2. Double End Shut Off Coupler Standard Pressure

Enchufes Doble/Presión Estándar

万能流体繼手両路開閉型 快速接头



Connect



Disconnect

This is a double path switching type coupler having an automatic valve mechanism at both the socket and the plug. Both are sealed instantly on disconnection. A variety of packing materials are permitted in accordance with the type of fluid.

Pressure Rating & Application

Withstanding capacity varies according to the sizes of the main body materials against pressure.

Material	Brass				Steel, Stainless Steel			
	1/8 1/4 3/8	1/2 3/4	1-1/4 1-1/2	2	1/8 1/4 3/8	1/2 3/4	1-1/4 1-1/2	2
Pressure MPa (kgf/cm ²)								
Working Pressure	5.0 (51)	3.0 (31)	2.0 (20)	1.5 (15)	7.5 (76)	4.5 (46)	3.0 (31)	2.0 (20)
Pressure Resistance	7.5 (76)	4.5 (46)	3.0 (31)	2.3 (24)	10.0 (102)	6.5 (66)	4.5 (46)	3.0 (31)
Major Applicable Fluid	Air, Water, Gasoline, Heavy Oil, Kerosene			S.S.: Salt Water Acid, Alkali S.: Operating Oil				

Socket & Plug

S Series Socket



P Series Plug

Female Pipe Thread	Part No.	Unit Per Pc.		
		Steel CODE	Brass CODE	S. Steel CODE

S Series Socket

Rc 1/8	1S-A	35 15 01	35 15 11	35 15 21
Rc 1/4	2S-A	02	12	22
Rc 3/8	3S-A	03	13	23
Rc 1/2	4S-A	04	14	24
Rc 3/4	6S-A	05	15	25

P Series Plug

Rc 1/8	1P-A	35 15 31	35 15 41	35 15 51
Rc 1/4	2P-A	32	42	52
Rc 3/8	3P-A	33	43	53
Rc 1/2	4P-A	34	44	54
Rc 3/4	6P-A	35	45	55

Rc 1

Rc 1	8P-A	35 15 36	35 15 46	35 15 56
Rc 1-1/4	10P-A	37	47	57
Rc 1-1/2	12P-A	38	48	58
Rc 2	16P-A	39	49	59

Name of Mfr.: Nitto Kohki Co., Ltd.

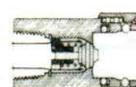
Note: Respective sockets can be connected with only respective corresponding numerical plugs as 4S-A with 4P-A.

3. Double End Shut Off Coupler High Pressure of 210 kgf/cm²

Enchufe Doble/Ultra Alta Presión

高压繼手両路開閉型 高压快速接头

Recommended for high pressure, hydraulic circuit. Made of special steel for high pressure service. Fluid in both socket and plug are stopped automatically by an inner valve when disconnected.

**Pressure Rating & Application**

Withstanding capacity varies according to the sizes of the main body material against pressure.

Material	Special Steel			
	Size	1/4, 3/8, 1/2, 3/4, 1		
Pressure				
Working pressure		20.6 MPa (210 kgf/cm ²)		
Pressure resistance		31.0 MPa (316 kgf/cm ²)		
Major Applicable Fluid		Operating Oil		

High Pressure Socket & Plug

HS Series Socket



HP Series Plug

How to order: CODE

Coupler, quick-connect, double end shut off for high pressure, MATERIAL, SOCKET or PLUG, female thread end, THREAD SIZE

How to order: CODE

Coupler, quick-connect, double end shut off for standard pressure, MATERIAL, SOCKET or PLUG, female thread end, THREAD SIZE

CODE	Part No.	Female Pipe Thread	CODE	Part No.	Female Pipe Thread	Unit Per Pcs.
35 16 01	Socket 2HS	Rc 1/4	35 16 11	Plug 2HP	Rc 1/4	
02	Socket 3HS	Rc 3/8	12	Plug 3HP	Rc 3/8	
03	Socket 4HS	Rc 1/2	13	Plug 4HP	Rc 1/2	
04	Socket 6HS	Rc 3/4	14	Plug 6HP	Rc 3/4	
05	Socket 8HS	Rc 1	15	Plug 8HP	Rc 1	

Name of Mfr.: Nitto Kohki Co., Ltd.

Note: Respective sockets can be connected with only respective corresponding numerical plugs as 2HS with 2HP.

4. Double End Shut Off Coupler Ultra High Pressure of 700 kgf/cm²

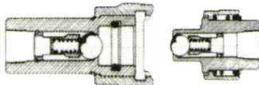
Enchufe Doble/Ultra Alta Presión

超高压専用継手両路開閉型 高压快速接头

For use on high pressure hydraulic tool oil fittings. Ring lock device has extra durability against shock or vibration.



Connect



Disconnect

Pressure Rating & Application

Withstanding capacity of these couplers against fluid pressure is as follows.

Working Pressure	68.6 MPa (700 kgf/cm ²)
Pressure Resistance	98.0 MPa (1,000kgf/cm ²)
Major Applicable Fluid	Operating Oil

Ultra High Pressure Socket & Plug



700R Series Socket



700R Series Plug

How to order: CODE

Coupler, quick-connect, double end shut off for ultra high pressure, special hard steel, SOCKET or PLUG, female thread end, THREAD SIZE

Unit Per Pcs.

CODE	Part No.	Female Pipe Thread	Unit Per Pcs.
35 16 21	Socket 700R-3S	Rc 3/8	
22	Socket 700R-4S	Rc 1/2	
23	Plug 700R-3P	Rc 3/8	
24	Plug 700R-4P	Rc 1/2	

Name of Mfr.: Nitto Kohki Co., Ltd.

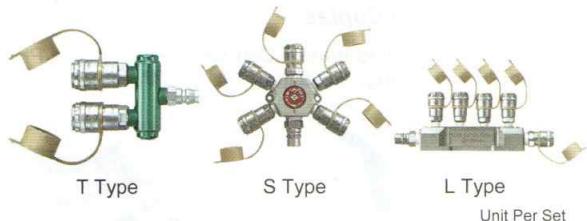
Line Couplers

Branch Piping Couplers for Air

Distribución Aire, Enchufe Rápido

空気用簡易集合配管具 空气分配管具

A branch piping coupler is useful for simultaneous connection of multiple hose to a single air supply source. Three types are available, Branch type (Type T), Star type (Type S), and Line type (Type L). Centralized piping can be set-up in any desired location.



Unit Per Set

CODE	Type	Body Mounting		Accessory Socket
		Socket	Plug	
35 16 50	200T	20SM (1/4)×2	20PM (1/4)×1	-
51	200S	20SM (1/4)×4 40SM (1/2)×1	400PM (1/2)×1	400SH (1/2)×1
53	200L	20SM (1/4)×4 40SM (1/2)×1	400PM (1/2)×1	400SH (1/2)×1

Applicable Plug Type: 20 series: 20PH, 20PM, 20PF

30 series: 30PH, 30PM, 30PF

40 series: 40PH, 40PM, 40PF

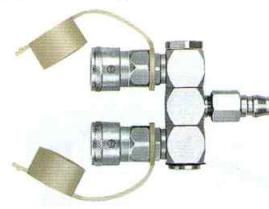
Name of Mfr.: Nitto Kohki Co., Ltd.

Rotary Line Cuplas

Distribución Aire , Rotatorio

ロータリーラインカップラ - 旋转式空气分接头

Branching coupler with a rotary mechanism allows simultaneous connection of two or three outlet hoses from a single air source. Air inlet socket moves freely in every direction 360°. A swivel mechanism also permits the hoses to swivel freely.



RT Type



RE Type

Unit Per Set

CODE		35 16 56	35 16 57
Type		RT (2-branches)	RE (3-branches)
Size	Inlet	1/4" (20PF)	R 1/2 (Male)
	Outlet	1/4" socket	
Material	Body	Brass (Chrome-plated)	Steel (Chrome-plated)
	Coupler		
Working Pressure		1.5 MPa (15 kgf/cm ²)	
Pressure Resistance		2.0 MPa (20 kgf/cm ²)	
Applicable Plug Type		20 series: 20PH, 20PM, 20PF 30 series: 30PH, 30PM, 30PF 40 series: 40PH, 40PM, 40PF	

Name of Mfr.: Nitto Kohki Co., Ltd.

Purge System Hi Couplers and Line Couplers

Coples Altos y Coples para Linea de Sistemas de Purga

ページ式クイックカップラー・ラインパックカップラー

驱氣式Hi接头

Push-to-connect operation with valve opening and closing by the purge system lever action, which eliminates unpleasant shock and noise on disconnection.

The lever will never turn to open until plug is connected by means of safety measure.

Purge System Hi Cuplas

Made of chrome plated brass. Can be connected with PH, PM and PF series plugs sized from 1/4" to 3/4".



Unit Per Pcs.					
CODE	Model	Size Male Thread	Working Pressure	Max. Pressure	Applicable Plug Type
35 16 61	PV-20SM	R1/4"			20, 30, 40 series
62	PV-30SM	R3/8"			
63	PV-40SM	R1/2"	1.0MPa (10 kgf/cm ²)	1.5MPa (15 kgf/cm ²)	
35 16 64	PV-400SM	R1/2"			400, 600, 800 series
65	PV-600SM	R3/4"			

Note: Applicable Plug Type

20 series : 20PH, 20PM, 20PF
30 series : 30PH, 30PM, 30PF
40 series : 40PH, 40PM, 40PF
400 series : 400PH, 400PM, 400PF
600 series : 600PH, 600PM, 600PF
800 series : 800PH, 800PM, 800PF

Name of Mfr.: Nitto Kohki Co., Ltd.

* Method of operation

1. Push-to-connect operation.
(In this stage, the valve in the socket is not open.)



2. Turning down the lever opens the valve and allows the fluid to flow.
(The turned-down lever works as a sleeve stopper and prevents disconnection.)



3. When the lever is pulled up, residual air pressure in the plug is purged without an unpleasant popping noise and a hose whip back motion on disconnection.
(In this stage, the socket valve is still closed.)



CODE		35 16 71
Type	Inlet	R 1/2
Size	Outlet	3/8" Socket (PV-30SM)
Body material		Brass (Chrome plated)
Working pressure		1.0 MPa (10 kgf/cm ²)
Pressure resistance		1.5 MPa (15 kgf/cm ²)
Applicable Plug Type		20 series: 20PH, 20PM, 20PF 30 series: 30PH, 30PM, 30PF 40 series: 40PH, 40PM, 40PF

Name of Mfr.: Nitto Kohki Co., Ltd.

Cam and Groove Couplings

Acoplamientos para Leva y Ranura

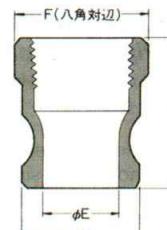
エバータイプカップリング 凸轮及槽式连接器

They are quick, tight, leakproof connections to pipe, tubing, hose or tanks and provide quick liquid and material hose connections that seal tight and stay tight. Sizes from 1/2" to 8" are available. They are made of aluminium alloy, brass, stainless steel and other metals for use with liquids, vapors, gases and air-blown dry products. Suitable for use with single connections and where changes in connection to a number of tanks or outlets may be required.

Rated Pressure of Material

Material	Nom. Size Inch	Rated Pressure (kgf/cm ²)	Test Pressure (kgf/cm ²)	Rated Temperature °C
Aluminium Alloy, Brass	1/2 - 2	18	21	107
	2-1/2	11		
	3	9		
	4	7		
Stainless Steel	1/2 - 2	18	21	232
	2-1/2	16		
	3	14		
	4	11		

Type A: Plug (Male Coupler) with Female Thread



Purge System Line Cuplas

Línea del sistema de purga Cuplas

バージシステムライン・カップラス

清洗系統管路 Cuplas

Made of chrome plated brass. Can be connected with PH, PM and PF series plugs sized from 1/4" to 3/4".

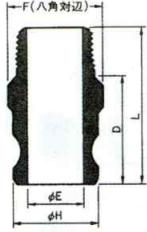
Specification					
Nom Size		Size mm			
Inch	mm	E	F	H	L
1/2	15	14	35	32	41
3/4	20	20	35	32	41
1	25	24	41	37	50
1-1/4	32	29	48	45	56
1-1/2	40	37	58	53	57
2	50	46	69	63	62
2-1/2	65	56	84	76	92
3	80	72	99	92	71
4	100	98	129	120	81
5	125	121	149	146	85
6	150	149	191	176	86
8	200	203	260	241	111

How to order: CODE

Coupling, cam & groove, Type A,
plug (male coupler) with female thread, MATERIAL, SIZE

Unit Per Pc.

Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	15	35 17 01	35 17 15	35 17 31
3/4	20	02	16	32
1	25	03	17	33
1-1/4	32	04	18	34
1-1/2	40	05	19	35
2	50	35 17 06	35 17 20	35 17 36
2-1/2	65	07	21	37
3	80	08	22	38
4	100	09	23	39
5	125	10	24	40
6	150	35 17 11	35 17 25	35 17 41
8	200	12	26	42

Type F : Plug (Male Coupler) with Male Thread

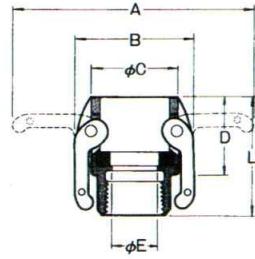
Specification

Nom Size		Size mm				
Inch	mm	D	E	F	H	L
1/2	15	38	14	35	32	59
3/4	20	38	20	35	32	59
1	25	46	24	41	37	72
1-1/4	32	54	29	48	45	80
1-1/2	40	56	37	58	53	79
2	50	62	46	69	63	90
2-1/2	65	70	56	84	76	102
3	80	71	72	99	92	103
4	100	81	98	129	120	119
5	125	82	121	149	146	124
6	150	83	149	196	176	127
8	200	111	203	260	241	169

How to order: CODE

Coupling, cam & groove, Type F, plug (male coupler) with male thread, MATERIAL, SIZE

Unit Per Pc.				
Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	15	35 17 51	35 17 65	35 17 81
3/4	20	52	66	82
1	25	53	67	83
1-1/4	32	54	68	84
1-1/2	40	55	69	85
2	50	35 17 56	35 17 70	35 17 86
2-1/2	65	57	71	87
3	80	58	72	88
4	100	59	73	89
5	125	60	74	90
6	150	35 17 61	35 17 75	35 17 91
8	200	62	76	92

Type D: Socket (Female Coupler) with Female Thread

Specification

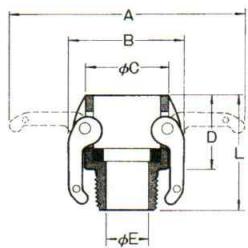
Nom Size		Size mm				
Inch	mm	A	B	C	D	E
1/2	15	116	54	41	32	16
3/4	20	116	54	41	32	22
1	25	125	61	47	41	25
1-1/4	32	181	83	58	49	35
1-1/2	40	189	91	65	46	38
2	50	199	101	75	52	49
2-1/2	65	210	112	91	56	61
3	80	254	138	108	59	76
4	100	282	166	140	59	94
5	125	307	191	165	63	121
6	150	409	255	198	74	146
8	200	474	320	264	102	203

How to order: CODE

Coupling, cam & groove, Type D, socket (female coupler) with female thread, MATERIAL, SIZE

Unit Per Pc.

Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	15	35 18 01	35 18 15	35 18 31
3/4	20	02	16	32
1	25	03	17	33
1-1/4	32	04	18	34
1-1/2	40	05	19	35
2	50	35 18 06	35 18 20	35 18 36
2-1/2	65	07	21	37
3	80	08	22	38
4	100	09	23	39
5	125	10	24	40
6	150	35 18 11	35 18 25	35 18 41
8	200	12	26	42

Type B: Socket (Female Coupler) with Male Thread

Specification

Nom Size		Size mm					
Inch	mm	A	B	C	D	E	L
1/2	15	116	54	41	32	14	52
3/4	20	116	54	41	32	19	52
1	25	125	61	47	41	25	63
1-1/4	32	181	83	58	46	32	71
1-1/2	40	189	91	65	46	38	69
2	50	199	101	75	52	51	78
2-1/2	65	210	112	90	57	61	89
3	80	254	138	108	58	76	90
4	100	282	166	140	59	94	98
5	125	307	191	165	63	120	106
6	150	409	255	198	73	146	116

How to order: CODE

Coupling, cam & groove, Type B, socket (female coupler) with male thread, MATERIAL, SIZE

Specification

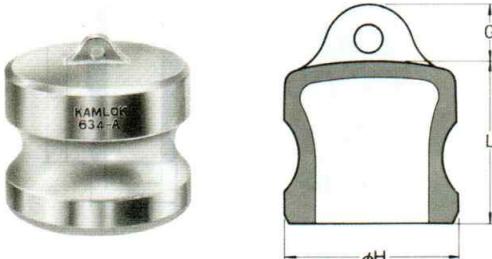
Nom Size		Size mm					
Inch	mm	E	H	I	J	K	L
1/2	13	9	22	14	24	38	65
3/4	20	14	32	21	34	51	87
1	25	20	37	27	41	60	103
1-1/4	32	25	45	34	49	57	110
1-1/2	40	32	53	41	57	60	114
2	50	41	63	53	72	70	130
2-1/2	65	57	76	67	86	80	144
3	80	68	92	79	100	100	164
4	100	89	120	105	133	108	178
5	125	114	146	134	160	127	196
6	150	142	176	157	187	146	224
8	200	188	241	207	255	150	266

How to order: CODE

Coupling, cam & groove, Type E, plug (male coupler) with hose end, MATERIAL, SIZE

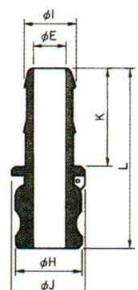
Unit Per Pcs.

Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	13	35 19 00	35 19 14	35 19 30
3/4	20	01	15	31
1	25	02	16	32
1-1/4	32	03	17	33
1-1/2	40	04	18	34
2	50	35 19 05	35 19 19	35 19 35
2-1/2	65	06	20	36
3	80	07	21	37
4	100	08	22	38
5	125	09	23	39
6	150	35 19 10	35 19 24	35 19 40
8	200	11	25	41

Dust Plug

Specification

Nom Size		Size mm		
Inch	mm	G	H	L
1/2	13	9	24	36
3/4	20	12	32	20
1	25	13	37	33
1-1/4	32	14	45	40
1-1/2	40	16	53	41
2	50	19	63	46
2-1/2	65	11	76	51
3	80	11	92	51
4	100	13	120	52
5	125	14	146	55
6	150	16	176	60
8	200	12	241	92

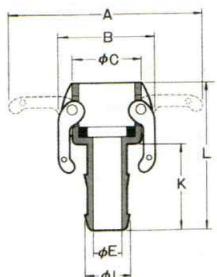
Type E: Plug (Male Coupler) with Hose End

How to order: CODE

Coupling, cam & groove, dust plug, MATERIAL, SIZE

Unit Per Pcs.

Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	13	35 19 50	35 19 64	35 19 80
3/4	20	51	65	81
1	25	52	66	82
1-1/4	32	53	67	83
1-1/2	40	54	68	84
2	50	35 19 55	35 19 69	35 19 85
2-1/2	65	56	70	86
3	80	57	71	87
4	100	58	72	88
5	125	59	73	89
6	150	35 19 60	35 19 74	35 19 90
8	200	61	75	91

Type C: Socket (Female Coupler) with Hose End

Specification

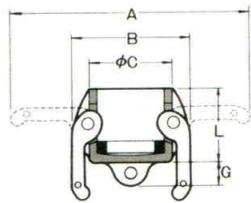
Nom. Size		Size mm						
Inch	mm	A	B	C	E	I	K	L
1/2	13	114	42	32	8	15	35	65
3/4	20	116	54	41	14	21	51	83
1	25	125	61	47	20	27	57	98
1-1/4	32	181	83	58	25	34	59	105
1-1/2	40	189	91	65	32	41	61	107
2	50	199	101	75	45	53	70	122
2-1/2	65	210	112	90	57	67	79	135
3	80	254	138	108	67	79	102	161
4	100	282	166	140	89	105	108	167
5	125	307	191	165	114	134	127	189
6	150	409	255	198	142	157	146	214
8	200	474	320	264	188	207	150	252

How to order: CODE

Coupling, cam & groove, Type C, socket (female coupler) with hose end, MATERIAL, SIZE

Unit Per Pcs.

Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	13	35 20 00	35 20 14	35 20 30
3/4	20	01	15	31
1	25	02	16	32
1-1/4	32	03	17	33
1-1/2	40	04	18	34
2	50	35 20 05	35 20 19	35 20 35
2-1/2	65	06	20	36
3	80	07	21	37
4	100	08	22	38
5	125	09	23	39
6	150	35 20 10	35 20 24	35 20 40
8	200	11	25	41

Dust Cap

Specification

Nom. Size		Size mm				
Inch	mm	A	B	C	G	L
1/2	13	114	42	32	9	47
3/4	20	116	54	41	10	34
1	25	125	61	47	12	41
1-1/4	32	181	83	58	11	47
1-1/2	40	189	91	65	12	46
2	50	199	101	75	12	52
2-1/2	65	210	112	90	14	56
3	80	254	138	108	15	59
4	100	282	166	140	12	59
5	125	307	191	165	13	63
6	150	409	255	198	16	68
8	200	474	320	264	12	105

How to order: CODE

Coupling, cam & groove, dust cap, MATERIAL, SIZE

Unit Per Pcs.

Nom. Size		CODE		
Inch	mm	Aluminium Alloy	Brass	Stainless Steel
1/2	13	35 20 50	35 20 64	35 20 80
3/4	20	51	65	81
1	25	52	66	82
1-1/4	32	53	67	83
1-1/2	40	54	68	84
2	50	35 20 55	35 20 69	35 20 85
2-1/2	65	56	70	86
3	80	57	71	87
4	100	58	72	88
5	125	59	73	89
6	150	35 20 60	35 20 74	35 20 90
8	200	61	75	91

Spool Adaptor

Part SA spool adaptor connects two lengths of hose with coupler ends. 1/2" to 6".



Unit Per Pcs.

CODE	Nom. Size	Alligator No.	CODE	Nom. Size	Alligator No.
Aluminium Alloy					
35 20 12	1/2"	SM997015	35 20 29	2"	SM997050
13	3/4"	SM997020	42	2-1/2"	SM997065
26	1"	SM997025	43	3"	SM997075
27	1-1/4"	SM997032	44	4"	SM997100
28	1-1/2"	SM997040			

(to be continued)

Unit Per Pc.					
CODE	Nom. Size	Alligator No.	CODE	Nom. Size	Alligator No.
Brass					
35 20 45	1/2"	SM996015	35 20 62	2"	SM996050
46	3/4"	SM996020	63	2-1/2"	SM996065
47	1"	SM996025	76	3"	SM996075
48	1-1/4"	SM996032	77	4"	SM996100
49	1-1/2"	SM996040	78	6"	SM996150
Stainless Steel					
35 20 79	1/2"	SM995015	35 20 96	2"	SM995050
92	3/4"	SM995020	97	2-1/2"	SM995065
93	1"	SM995025	98	3"	SM995075
94	1-1/4"	SM995032	99	4"	SM995100
95	1-1/2"	SM995040	35 21 00	6"	SM995150

Unit Per Pc.					
CODE	Size	Alligator No.	CODE	Size	Alligator No.
Enveloppe Open			Enveloppe Closed		
35 21 21	1/2"	SM985013	35 21 31	1/2"	SM987013
22	3/4"	SM985019	32	3/4"	SM987019
23	1"	SM985025	33	1"	SM987025
24	1-1/4"	SM985032	34	1-1/4"	SM987032
25	1-1/2"	SM985038	35	1-1/2"	SM987038
35 21 26	2"	SM985050	35 21 36	2"	SM987050
27	2-1/2"	SM985065	37	2-1/2"	SM987065
28	3"	SM985075	38	3"	SM987075
29	4"	SM985100	39	4"	SM987100

Cam & Groove Rubber Gasket Buna N



Cam & Groove Handle Rings and Pins



Unit Per Pc.					
CODE	Size	Alligator No.	CODE	Size	Alligator No.
Brass			Stainless Steel		
35 21 41	1"	SM990026	35 21 51	1/2"	SM990015
42	1-1/4"	SM990033	52	3/4"	SM990020
43	1-1/2"	SM990039	53	1"	SM990025
44	2"	SM990051	54	1-1/4"	SM990032
45	2-1/2"	SM990066	55	1-1/2"	SM990038
35 21 46	3"	SM990076	35 21 56	2"	SM990050
47	4"	SM990101	57	2-1/2"	SM990065
48	5"	SM990126	58	3"	SM990075
49	6"	SM990151	59	4"	SM990100
			60	5"	SM990125
			35 21 61	6"	SM990150

Cam & Groove PTFE Gaskets



Cam & Groove Pins

Made of stainless steel.



CODE	Nom. Size	Actual Size mm	Alligator No.
35 21 13	3/4"	23 x 35 x 5	SM988020
14	1"	27 x 40 x 6	SM988025
15	1-1/2"	56 x 41 x 6	SM988040
16	2"	67 x 50 x 6	SM988050
17	2-1/2"	79 x 60 x 6	SM988065
35 21 18	3"	97 x 78 x 6	SM988075
19	4"	125 x 101 x 6	SM988100

Unit Per Pc.					
CODE	Size	Alligator No.	CODE	Size	Alligator No.
35 21 71	1/2"	SM994013	35 21 77	2-1/2"	SM994065
72	3/4"	SM994020	78	3"	SM994075
73	1"	SM994025	79	4"	SM994100
74	1-1/4"	SM994032	80	5"	SM994125
75	1-1/2"	SM994038	81	6"	SM994150
35 21 76	2"	SM994050			

Cam & Groove PTFE Gaskets



Any of these Adaptors will quick connect to.....



Part A Male coupler /female thread.
1/2" to 8".

Part F Male coupler /male thread.
1/2" to 8".

Part E Male coupler /hose end.
3/4" to 8".

Part E reducer or increaser (illustrated). Sizes 3" to 4".	Part AW male adaptor/socket or butt weld. 1/2" to 10".	Part AS male adaptor/straight female pipe thread for dry products 3" to 10".

....any of these couplers of the same size

Part B female coupler/male thread. 1/2" to 6".	Part D female coupler/socket or butt weld. 1/2" to 10". All metals.	Part C female coupler/hose end. 1/2" to 8".
Part B reducer female coupler/male thread. Sizes 2" to 4". Aluminium, brass.	Part DW female coupler/socket or butt weld. 1/2" to 10". All metals.	Part DS female coupler/female straight pipe thread for dry products 3" to 10". All metals.

Coupling Assemblies

	Part SA spool adaptor connects two lengths of hose with coupler ends. 1/2" to 6". In all metals except in larger sizes. (Spool couplers are also available.)
	Gaskets are of buna composition unless another material is specified. Other available gasket materials include Neoprene, pure gum, butyl, teflon, viton, E.P.T., Thiokol or any other material to meet specifications.
	Handles are stainless steel or forged bronze with stainless steel pins. Cadmium plated rings are supplied on all sizes except 1/2", 3/4", 1", 6", 8", or 10".
	Brass chain, with two "S" hooks for attaching dust caps or dust plugs to adaptors or couplers, is available in any length desired.

Quick Disconnect Couplings for Oil pressure and Liquid

Acoplamientos de desconexión rápida
简单脱着カップリング 便于装卸式联轴器

A quick connect and disconnect couplings suitable for flowing large spills of general hydraulic oil, water and chemicals by the possible large flow amount. There are three types of material; carbon steel, Brass or Stainless steel (SUS-304).



Maximum Usable Pressure of the Seal Material

Body	Seal	Working Temp. Range	Max. working pressure MPa (Stillness Pressure)				
			04	06	08	12	16
Carbon Steel	NBR	-30 to +93°C	45.0 (21.0)	32.0 (21.0)	28.0 (21.0)	25.0 (21.0)	14.0 (14.0)
Brass	NBR	-30 to +93°C	7.0	7.0	7.0	7.0	7.0
Stainless Steel	NBR	-30 to +93°C	7.0	7.0	7.0	7.0	7.0

Coupler Side Main Seal Form

Material	Body	Seal	Form	Features	
				Single O ring	U Packer
Carbon Steel		NBR		It exhibits stable performance specially when under dynamic pressure.	
Brass		NBR		It exhibits superior sealing performance than that of a single o-ring at less than the maximum usable pressure of 7.0 MPa.	
Stainless Steel		NBR			

Carbon Steel

	Coupler	Nipple
With Valve		
Without Valve		
With PH Valve		

Remark: PH valve enables connection even with residual pressure. Connection is possible at 17.7 N even under the residual pressure of 7.0 MPa. It can be connected when residual pressure is present, but cannot be disconnected under the circumstances.

Carbon Steel Coupler and Nipple Combination List

Type	VHN	OHN	PHN
VHC	○	○	○
OHC	×	○	×
PHC	○	×	×

Remark: ○ = Applicable, × = Not applicable

Carbon Steel Couplers

Unit Per Pcs.

CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
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VHC - Female Thread (with Valve)

35 23 01	VHC4-4F-SO	45.0	Rc 1/4	95
02	VHC6-6F-SO	32.0	Rc 3/8	155
03	VHC8-8F-SO	28.0	Rc 1/2	205
04	VHC12-12F-SO	25.0	Rc 3/4	390
05	VHC16-16F-SO	14.0	Rc 1	550

VHC - Male Thread (with Valve)

35 23 06	VHC4-4M-SO	45.0	Rc 1/4	98
07	VHC6-6M-SO	32.0	Rc 3/8	158
08	VHC8-8M-SO	28.0	Rc 1/2	218
09	VHC12-12M-SO	25.0	Rc 3/4	400
10	VHC16-16M-SO	14.0	Rc 1	560

OHC - Female Thread (without Valve)

35 23 11	OHC4-4F-SO	45.0	Rc 1/4	70
12	OHC6-6F-SO	32.0	Rc 3/8	112
13	OHC8-8F-SO	28.0	Rc 1/2	158
14	OHC12-12F-SO	25.0	Rc 3/4	286
15	OHC16-16F-SO	14.0	Rc 1	425

OHC - Male Thread (without Valve)

35 23 16	OHC4-4M-SO	45.0	Rc 1/4	75
17	OHC6-6M-SO	32.0	Rc 3/8	120
18	OHC8-8M-SO	28.0	Rc 1/2	160
19	OHC12-12M-SO	25.0	Rc 3/4	274
20	OHC16-16M-SO	14.0	Rc 1	-

PHC - Female Thread (with PH Valve)

35 23 21	PHC6-6F-SO	32.0	Rc 3/8	-
22	PHC8-8F-SO	28.0	Rc 1/2	-
23	PHC12-12F-SO	25.0	Rc 3/4	-
24	PHC16-16F-SO	14.0	Rc 1	-

PHC - Male Thread (with PH Valve)

35 23 26	PHC6-6M-SO	32.0	Rc 3/8	-
27	PHC8-8M-SO	28.0	Rc 1/2	-
28	PHC12-12M-SO	25.0	Rc 3/4	-
29	PHC16-16M-SO	14.0	Rc 1	-

Carbon Steel Nipples

Unit Per Pcs.

CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
------	----------	----------------------	-------------	------------

35 23 31	VHN4-4F	45.0	Rc 1/4	62
32	VHN6-6F	32.0	Rc 3/8	90
33	VHN8-8F	28.0	Rc 1/2	130
34	VHN12-12F	25.0	Rc 3/4	235
35	VHN16-16F	14.0	Rc 1	395

VHN - Male Thread (with Valve)

35 23 36	VHN4-4M	45.0	Rc 1/4	68
37	VHN6-6M	32.0	Rc 3/8	102
38	VHN8-8M	28.0	Rc 1/2	142
39	VHN12-12M	25.0	Rc 3/4	245
40	VHN16-16M	14.0	Rc 1	405

OHN - Female Thread (without Valve)

35 23 41	OHN4-4F	45.0	Rc 1/4	27
42	OHN6-6F	32.0	Rc 3/8	44
43	OHN8-8F	28.0	Rc 1/2	64
44	OHN12-12F	25.0	Rc 3/4	142
45	OHN16-16F	14.0	Rc 1	218

OHN - Male Thread (without Valve)

35 23 46	OHN4-4M	45.0	Rc 1/4	28
47	OHN6-6M	32.0	Rc 3/8	52
48	OHN8-8M	28.0	Rc 1/2	80
49	OHN12-12M	25.0	Rc 3/4	112
50	OHN16-16M	14.0	Rc 1	170

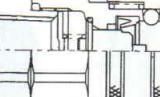
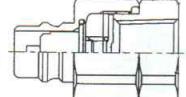
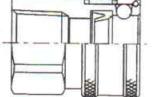
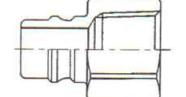
PHN - Female Thread (with PH Valve)

35 23 51	PHN6-6F	32.0	Rc 3/8	-
52	PHN8-8F	28.0	Rc 1/2	-
53	PHN12-12F	25.0	Rc 3/4	-
54	PHN16-16F	14.0	Rc 1	-

PHN - Male Thread (with PH Valve)

35 23 56	PHN6-6M	32.0	Rc 3/8	-
57	PHN8-8M	28.0	Rc 1/2	-
58	PHN12-12M	25.0	Rc 3/4	-
59	PHN16-16M	14.0	Rc 1	-

Brass

	Coupler	Nipple
With Valve		
Without Valve		

Brass Coupler and Nipple Combination List

Type	BVHN	BOHN
BVHC	○	○
BOHC	×	○

Remark: ○ = Applicable, × = Not applicable

Brass Couplers

Unit Per Pcs.

CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
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BVHC - Female Thread (with Valve)

35 23 61	BVHC4-4F-U	7.0	Rc 1/4	95
62	BVHC6-6F-U	7.0	Rc 3/8	155
63	BVHC8-8F-U	7.0	Rc 1/2	205
64	BVHC12-12F-U	7.0	Rc 3/4	390
65	BVHC16-16F-U	7.0	Rc 1	550

BVHC - Male Thread (with Valve)

35 23 66	BVHC4-4M-U	7.0	Rc 1/4	98
67	BVHC6-6M-U	7.0	Rc 3/8	158
68	BVHC8-8M-U	7.0	Rc 1/2	218
69	BVHC12-12M-U	7.0	Rc 3/4	400
70	BVHC16-16M-U	7.0	Rc 1	560

BOHC - Female Thread (without Valve)

35 23 71	BOHC4-4F-U	7.0	Rc 1/4	70
72	BOHC6-6F-U	7.0	Rc 3/8	112
73	BOHC8-8F-U	7.0	Rc 1/2	158
74	BOHC12-12F-U	7.0	Rc 3/4	286
75	BOHC16-16F-U	7.0	Rc 1	425

(to be continued)

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
BOHC - Male Thread (without Valve)				
35 23 76	BOHC4-4M-U	7.0	Rc 1/4	75
77	BOHC6-6M-U	7.0	Rc 3/8	120
78	BOHC8-8M-U	7.0	Rc 1/2	160
79	BOHC12-12M-U	7.0	Rc 3/4	274
80	BOHC16-16M-U	7.0	Rc 1	-

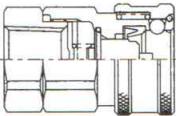
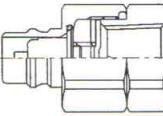
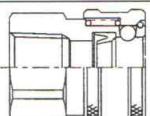
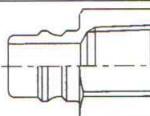
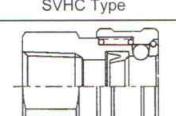
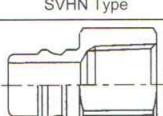
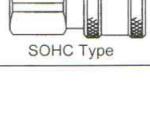
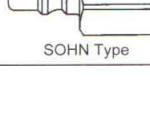
Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
BVHN - Female Thread (with Valve)				
35 23 81	BVHN4-4F	7.0	Rc 1/4	62
82	BVHN6-6F	7.0	Rc 3/8	90
83	BVHN8-8F	7.0	Rc 1/2	130
84	BVHN12-12F	7.0	Rc 3/4	235
85	BVHN16-16F	7.0	Rc 1	395

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
BVHN - Male Thread (with Valve)				
35 23 86	BVHN4-4M	7.0	Rc 1/4	68
87	BVHN6-6M	7.0	Rc 3/8	102
88	BVHN8-8M	7.0	Rc 1/2	142
89	BVHN12-12M	7.0	Rc 3/4	245
90	BVHN16-16M	7.0	Rc 1	405

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
BOHN - Female Thread (without Valve)				
35 23 91	BOHN4-4F	7.0	Rc 1/4	27
92	BOHN6-6F	7.0	Rc 3/8	44
93	BOHN8-8F	7.0	Rc 1/2	64
94	BOHN12-12F	7.0	Rc 3/4	142
95	BOHN16-16F	7.0	Rc 1	218

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
BOHN - Male Thread (without Valve)				
35 23 96	BOHN4-4M	7.0	Rc 1/4	28
97	BOHN6-6M	7.0	Rc 3/8	52
98	BOHN8-8M	7.0	Rc 1/2	80
99	BOHN12-12M	7.0	Rc 3/4	112
35 24 00	BOHN16-16M	7.0	Rc 1	170

Stainless Steel (SUS-304)				
	Coupler	Nipple		
With Valve			SVHC Type	SVHN Type
			SOHC Type	SOHN Type
Without Valve			SVHC Type	SVHN Type
			SOHC Type	SOHN Type

Stainless Steel Coupler and Nipple Combination List

Type	SVHN	SOHN
SVHC	○	○
SOHC	×	○

Remark: ○ = Applicable, × = Not applicable

Stainless Steel Couplers

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
SVHC - Female Thread (with Valve)				
35 22 01	SVHC4-4F-U	7.0	Rc 1/4	95
02	SVHC6-6F-U	7.0	Rc 3/8	155
03	SVHC8-8F-U	7.0	Rc 1/2	205
04	SVHC12-12F-U	7.0	Rc 3/4	390
05	SVHC16-16F-U	7.0	Rc 1	550

SOHC - Female Thread (without Valve)				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
35 22 11	SOHC4-4F-U	7.0	Rc 1/4	70
12	SOHC6-6F-U	7.0	Rc 3/8	112
13	SOHC8-8F-U	7.0	Rc 1/2	158
14	SOHC12-12F-U	7.0	Rc 3/4	286
15	SOHC16-16F-U	7.0	Rc 1	425

SOHC - Male Thread (without Valve)				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
35 22 16	SOHC4-4M-U	7.0	Rc 1/4	75
17	SOHC6-6M-U	7.0	Rc 3/8	120
18	SOHC8-8M-U	7.0	Rc 1/2	160
19	SOHC12-12M-U	7.0	Rc 3/4	274
20	SOHC16-16M-U	7.0	Rc 1	-

Stainless Steel (SUS-304) Nipples

Unit Per Pcs.				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
SVHN - Female Thread (with Valve)				
35 22 21	SVHN4-4F	7.0	Rc 1/4	62
22	SVHN6-6F	7.0	Rc 3/8	90
23	SVHN8-8F	7.0	Rc 1/2	130
24	SVHN12-12F	7.0	Rc 3/4	235
25	SVHN16-16F	7.0	Rc 1	395

SVHN - Male Thread (with Valve)				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
35 22 26	SVHN4-4M	7.0	Rc 1/4	68
27	SVHN6-6M	7.0	Rc 3/8	102
28	SVHN8-8M	7.0	Rc 1/2	142
29	SVHN12-12M	7.0	Rc 3/4	245
30	SVHN16-16M	7.0	Rc 1	405

SOHN - Female Thread (without Valve)				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
35 22 31	SOHN4-4F	7.0	Rc 1/4	27
32	SOHN6-6F	7.0	Rc 3/8	44
33	SOHN8-8F	7.0	Rc 1/2	64
34	SOHN12-12F	7.0	Rc 3/4	142
35	SOHN16-16F	7.0	Rc 1	218

SOHN - Male Thread (without Valve)				
CODE	Part No.	Working Pressure MPa	Thread Size	Weight grm
35 22 36	SOHN4-4M	7.0	Rc 1/4	28
37	SOHN6-6M	7.0	Rc 3/8	52
38	SOHN8-8M	7.0	Rc 1/2	80
39	SOHN12-12M	7.0	Rc 3/4	112
40	SOHN16-16M	7.0	Rc 1	170

Conversion Table

[Length]	m	km	in	ft	yd	mile
m	1	1×10^{-3}	39.37	3.28	1.093	6.214×10^{-4}
km	1×10^3	1	3.937×10^4	3,280	1,093	0.621
in	0.0254	2.54×10^{-5}	1	1/12	1/36	1.58×10^{-5}
ft	0.305	3.048×10^{-4}	12	1	1/3	1.894×10^{-4}
yd	0.914	9.144×10^{-4}	36	3	1	5.682×10^{-4}
mile	1,609	1.609	63,360	5,280	1,760	1

[Mass (Weight)]	g	kg	t	lb	oz
g	1	1×10^{-3}	1×10^{-6}	2.204×10^{-3}	0.0352
kg	1×10^3	1	1×10^{-3}	2.204	35.27
t	1×10^6	1×10^3	1	2,204	35,270
lb	453.6	0.4536	4.536×10^{-4}	1	16
oz	28.35	0.02835	2.835×10^{-5}	1/16	1

[Volume]	cm ³ (cc or ml)	m ³	l	in ³	qt	pt	fl-oz	ft ³	gal
cm ³ (cc or ml)	1	0.000001	0.001	0.061	0.00088	0.0018	0.035	-	0.00022
m ³	1,000,000	1	1,000	61,024	880	1,760	35,195	35.314	220
l	1,000	0.001	1	61.024	0.880	1.760	35.195	0.035	0.220
in ³	16.387	0.000016	0.016	1	0.014	0.029	0.577	0.00058	0.0036
qt	1,136.52	0.0011	1.137	69.355	1	2	40	0.033	0.25
pt	568	0.00057	0.568	34.677	0.5	1	20	0.017	0.125
fl-oz	28.413	0.000028	0.028	1.734	0.025	0.05	1	0.0008	0.00625
ft ³	28,316	0.0283	28.316	1,728	29.922	59.844	958	1	7,481
gal	4,546	0.0045	4.546	277	4	8	160	0.134	.1

[Pressure]	bar	kgf/cm ²	lbf/cm ²	mmHg (0°C)	Pa (SI)
bar	1	1.020	14.50	750.1	100,000
kgf/cm ²	0.9807	1	14.22	753.6	98,066
lbf/cm ²	0.0689	0.0703	1	51.72	6,895
mmHg (0)	0.00133	0.0013	0.0193	1	133.3
Pa (SI)	1×10^{-5}	1.02×10^{-5}	1.45×10^{-4}	10.2×10^{-4}	1

[Stress]	Pa (SI)	MPa	kgf/mm ²	kgf/cm ²
Pa (SI)	1	1×10^{-6}	1.01972×10^{-7}	1.01972×10^{-5}
MPa	1×10^6	1	1.01972×10^{-1}	1.01972×10
kgf/mm ²	9.80665×10^6	9.80665	1	1×10^2
kgf/cm ²	9.80665×10^4	9.80665×10^{-2}	1×10^{-2}	1

[Force]	kW	kgf · m/sec	HP
kW	1	102.0	1.341
kgf · m/sec	0.009807	1	0.01315
HP	0.7457	76.04	1