



PNEUMATIC FITTINGS AND TUBE

www.sang-a.it



ONE-TOUCH FITTINGS

Application

- One-touch joints used in pneumatic piping.
- Used for a wide variety of models to meet all needs.

Feature

- Easy to connect/disconnect tube by one touch.
- PC type is useful for piping in confined space, given its six-angle wrench processing inside.
- Elliptical sleeve makes it possible to apply and remove the tube easily in confined space.
- Fittings are equipped with a Gasket, O-ring and Teflon-Treatment already on the thread.

Specification

Fluid	Air (No other gases or liquids)			
Working Pressure Range	0~290PSI			
Negative Pressure	-29.5 in Hg	-750mmHg(10Torr)		
Temperature Range	32~140°F 0~60°C			
Applicable Tube Material	Polyurethane and Nylon			



Product Code System



①Туре

②Tube Dia(∅D)

	Metric Size							Inch	Size					
Code	03	04	06	08	10	12	14	16	5/32	3/16	1/4	5/16	3/8	1/2
Dia	Ø3	Ø4	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø5/32	Ø3/16	Ø1/4	Ø5/16	Ø3/8	Ø1/2

③Thread Size(T)

* Metric Thread & R(PT) Thread

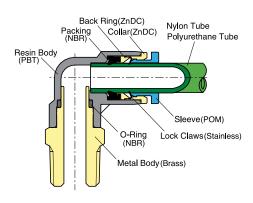
		,					
	Metric Size			Taper Pipe Thread			
Code	M3	M5	M6	01	02	03	04
Size	M3×0.5	M5 ×0.8	M6 ×1 0	R1/8	R1/4	R3/8	R1/2

* Inch Thread (UNF & NPT)

	Unified Fine Thread	Americ	an Standard	Taper Pipe	Thread
Code	U10U	N01U	N02U	N03U	N04U
Size	10-32UNF	NPT1/8	NPT1/4	NPT3/8	NPT1/2

(AU: Hexagon flat-to-flat inch specification (NPT)

Structural Diagram



Case In Use

▶POC Model

- The hexagonal hole of the inside body makes it possible to tighten the fitting with a hexagonal wrench.
- A hexagonal wrench must be used due to the round exterior.

▶PL Model

• Flexible for directional tube laying given its revolving construction of body (PL and PT type)

▶Elliptical Sleeve

• Elliptical sleeve makes it possible to apply and remove the tube easily in confined spaces.

One -Touch Fittings







COMPACT ONE-TOUCH FITTINGS

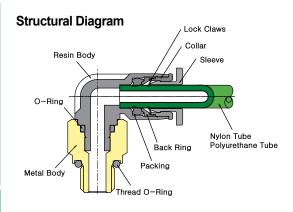
Application

- Compact type one-touch joints used in small types of pneumatic piping.
- A wide variety of models are available to meet most your needs.

Feature

- The world's smallest quick-fitting joints feature 40% smaller volume ratio and 20% smaller O.D. ratio in comparison to the conventional type.
- The compact type joints, which are nickel plated, are excellent not only in appearance but also in rust resistance.
- The elliptical sleeve helps easy application or removal of the tube in confined space.

Specification			
Fluid	Air(No oth	er gases or liquids)	
Working Pressure Range	0~150PSI	0~9Kgf/cm²(0~900kPa)	
Negative Pressure	-29.50 in Hg	-750mmHg(10Torr)	
Temperature Range	32~140° F	0~60°C	
Applicable Tube Material	Polyure	thane and Nylon	





Case In Use

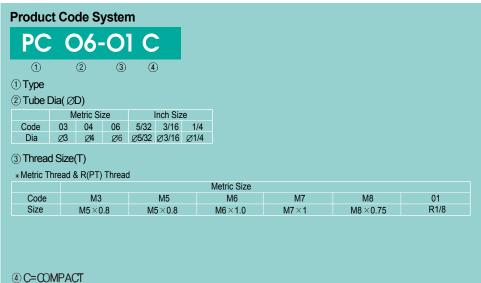
▶POC Model/PCC Model

The hexagonal shape on the inside of the body makes it possible to tighten the fitting by use of a hexagonal wrench.

In the case of POC, PCC a hexagonal wrench must be used due to the round exterior.

▶PLL Model/PL Model

Long brass body helps tightening with ease away from any obstacles.



Compact One -Touch Fitting





SPEED CONTROLLERS

Application

- Valve used for controlling the operation speed of a driving device.
- Used for movement of machines such as cylinder, pneumatic finger, etc.

Feature

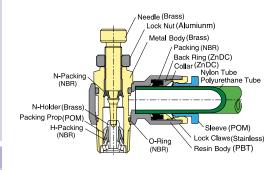
- Precisely permit the optimal rate of airflow for the smooth cylinder movement of driving devices.
- The Compact and light body permits use in confined space.
- Uni-directional airflow is available for either exhaust or inlet flow control methods.
- The compact design provides a comparable range of speed as the conventional speed controllers do.

Specification						
Fluid	Air(No other gases or liquids)					
Working Pressure Range	0~290PSI	0~20Kgf/ _{cm²} (0~2000kPa)				
Negative Pressure	7.5PSI	0.5Kgf/cm²(50kPa)				
Temperature Range	32~140° F	0~60°C				
Applicable Tube Material	Polyurethane and Nylon					



Product Code System 08-02 ① Type ② Tube Dia(ØD) 03 04 06 8 10 12 1/8 5/32 3/16 1/4 5/16 3/8 1/2 Dia Ø3 Ø4 Ø6 Ø8 Ø10 Ø12 Ø1/8 Ø5/32 Ø3/16 Ø1/4 Ø5/16 Ø3/8 Ø1/2 3 Thread Size(T) * Metric Thread & R(PT) Thread Taper Pipe Thread M3 M5 01 02 Code 03 Size M3×0.5 M5×0.8 R1/8 R1/4 R3/8 R1/2 *Inch Thread (UNF & NPT) Unified Fine Thread American Standard Taper Pipe Thread Code U10U N01U N02U N03U N04U Size 10-32UNF NPT1/8 NPT1/4 NPT3/8 NPT1/2 Control Method Meter out Туре Meter in Standard Compact Standard Compact Sleeve Blue Black Red Red (5)U: Hexagon flat-to-flat inch specification.(NPT)

Structural Diagram



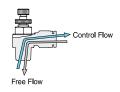
Speed Controllers



Fitting with G Thread (O-Ring)

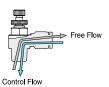


Case In Use



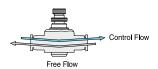
▶Out-Type

- The way to control of airflow from the thread to the sleeve.
- Air passes freely from the sleeve to the thread.



▶In-Type

- The way to control of airflow from the sleeve to the thread.
- Air passes freely from the thread to the sleeve.



▶Flat-Type

- The way to control of Free Flow or Control Flow upon piping in accordance with the signal on the body.
- Air flows from each side of sleeve.

ROTARY JOINTS

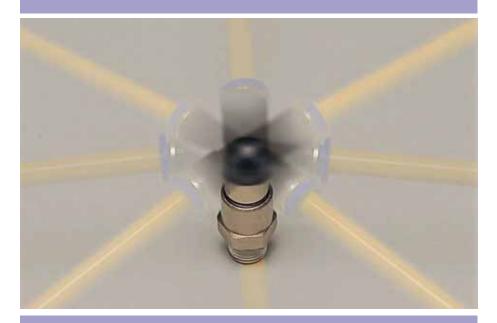
Application

- Used for supplying compressed air at swiveling or swinging connections.
- Used for index tables and industrial robots.

Feature

- Built in bearings, suitable for high-speed swiveling pneumatic connections..

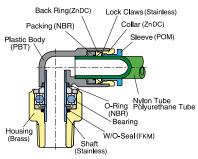
Specification Fluid Air(No other gases or liquids) 0~150PSI Working Pressure Range 0~9Kgf/cmi(0~900kPa) -750mmHg(10Torr) **Negative Pressure** -29.50 in Hg Temperature Range 32~140° F 0~60°C Polyurethane and Nylon Applicable Tube Material



Structural Diagram

▼High Rotary Joint Back Ring(ZnDC) Lock Claws (Stair Plastic Body (PBT) Collar(ZnDC) Sleeve (POM) Coupling (Brass) Nylon Tube Polyurethane Tube Shaft (Stainless)

▼ Rotary Joint



Product Code System

NHRC

① Type

② Tube Dia(ØD)

Code	04	06	00	10	12
Oodc	04	00	00	10	12
Dia	<i>Ø</i> 4	Ø6	Ø8	<i>Ø</i> 10	Ø12

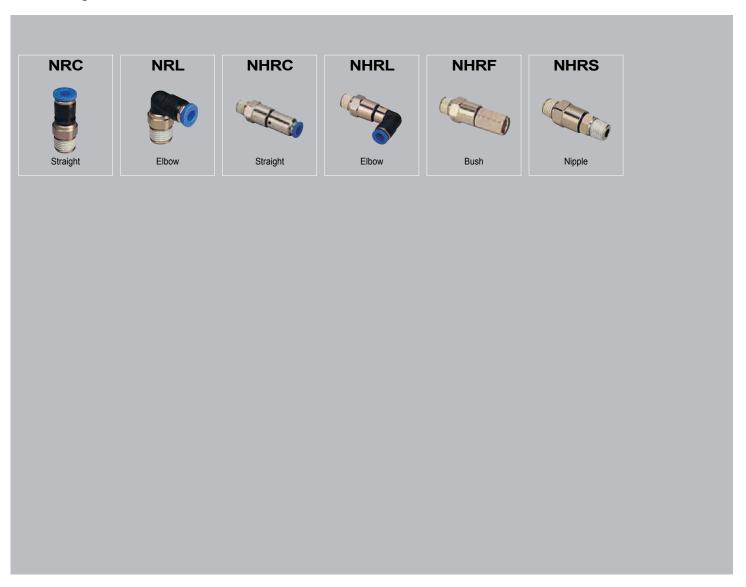
③ Thread Size(T)

	Metric Size		Taper Pipe Thread			
Code	M5	M6	01	02	03	04
Size	M5×0.8	M6 ×1.0	R1/8	R1/4	R3/8	R1/2

Number of Rotations

		Tube Dia	Ø4	Ø6	Ø8	Ø10	Ø12
r n m	Low	NRC, NRL	500	500	400	300	250
1.p.iii	High	NHRC. NHRL. NHRS. NHRF	1.500	1.200	1.200	1.000	1.000

Rotary Joints





STOP FITTINGS

Application

- Installed where the pneumatic connections are changed frequently.
- Used at laboratory or for instructing pneumatic connections.

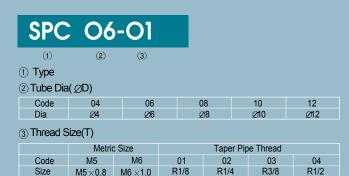
Feature

- Upon disconnecting the tube, the airflow will stop.

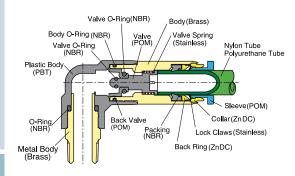
Specification Fluid Air(No other gases or liquids) Working Pressure Range 0~150PSI 0~9Kgf/cm(0~900kPa) Negative Pressure -29.50 in Hg -750mmHg(10Torr) Temperature Range 32~140° F 0~60°C Applicable Tube Material Polyurethane and Nylon



Product Code System



Structural Diagram



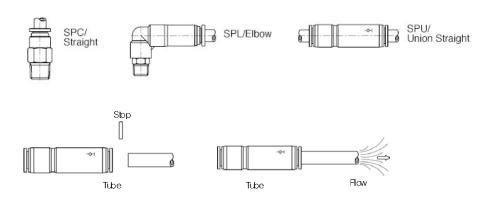
Stop Fittings



Fitting with G Thread (O-Ring)



Control Method



CHECK VALVES

Application

- Check Valves permit airflow in one direction.
- Used for maintaining the output pressure at a constant level.

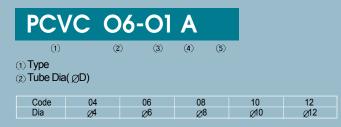
Feature

- The check valves permit the airflow in one direction but stops in the reverse direction.
- The check valve works at the pressure of 0.1kgf/cm², keeps 1.42 PSI in vacuum and connects at a low pressure.

Specification

Fluid	Air(No other gases or liquids)			
Working Pressure Range	0~150PSI			
Negative Pressure	-29.50 in Hg	-29.50 in Hg -750mmHg(10Torr)		
Temperature Range	32~140°F 0~60°C			
Applicable Tube Material	Polyurethane and Nylon			

Product Code System



(3) Thread Size(T)

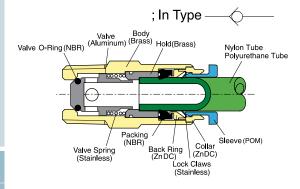
	Metric Size		Taper Pipe Thread			
Code	M5	M6	01	02	03	04
Size	M5×0.8	M6 ×1.0	R1/8	R1/4	R3/8	R1/2

4Control Method

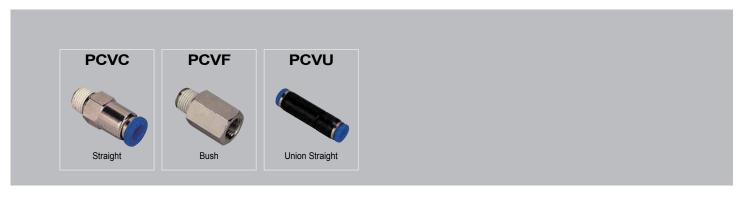
Туре	Meter IN	Meter OUT
Air Flow	Thread to Tube	Tube to Thread
PCVC		
PCVF		
PCVU		se of PCW model, you should pipe ing to signal of the body.

⑤U: Hexagon flat-to-flat inch specification.(NPT)

Structural Diagram



Check Valves





BALL VALVES

Application

- Used for controlling air supply in the opened and closed positions.

Feature

- Available for water as well as air with PPS resin body.
- The sectional dimension of the compact body optimizes as much flow as the tube capacity in proportion.

Fluid Air & Water Working Pressure Range 0~150PSI 0~9Kgf/_{Cmf}(0~900kPa) Negative Pressure -29.50 in Hg -750mmHg(10Torr) Temperature Range 32~140°F 0~60°C Applicable Tube Material Polyurethane and Nylon



Product Code System



1

Type Effective Sectional Area

	Metric Size			
Code	20	60		
Size	20 m²	60 _{mi} ²		

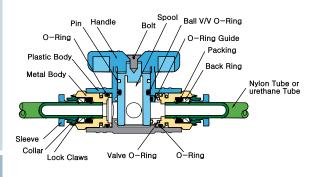
③ Tube Dia(ØD)

Code	06	08	10	12
Dia	Ø6	ø8	Ø10	Ø12

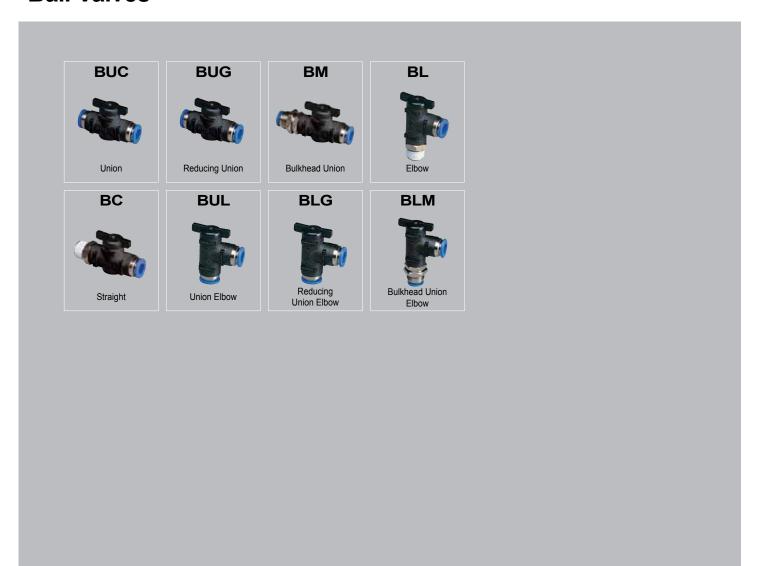
4 Thread Size(T)

	Taper Pipe Thread			
Code	01	02	03	04
Size	R1/8	R1/4	R3/8	R1/2

Structural Diagram



Ball Valves





HAND VALVES

Application

- Used for turning air pressure on and off for pneumatic devices.

Feature

- When off, the three-way direction control valve discharges the residual pressure and blocks air flow-in.

Fluid Air(No other gases or liquids) Working Pressure Range 0~150PSI 0~9Kgf/cmf(0~900kPa) Negative Pressure -29.50 in Hg -750mmHg(10Torr) Temperature Range 32~140°F 0~60°C Applicable Tube Material Polyurethane and Nylon



Product Code System

HVFS 06 - O1

① Type

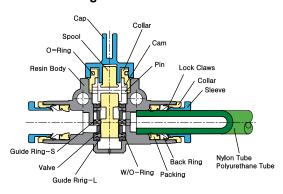
② Tube Dia(ØD)

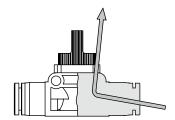
Code	06	08	10	12	
Dia	Ø6	Ø8	Ø10	Ø12	

③ Thread Size(T)

	Taper Pipe Thread				
Code	01 02 03 04				
Size	R1/8	R1/4	R3/8	R1/2	

Structural Diagram

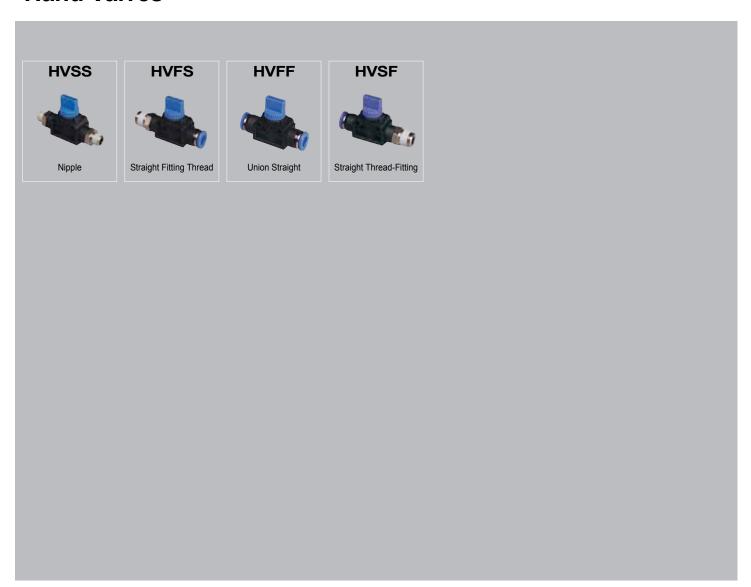




▶3 Way Direction, 2 Way Direction

- The three-way direction control valve, when the air is stopped, discharges residual pressure to the outlet, which assures safety in repairing or adjusting connected devices.
- The two-way direction control valve does not discharge residual pressure, and is suitable for a reservoir tank or other device that does not require a discharging residual pressure.
- The two-way direction control valve is also suitable for the system where a vacuum pipe is used.

Hand Valves





TWO-TOUCH FITTING AND SILENCERS

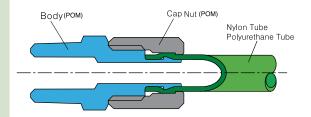
Application

- Nut-tightened air connector used for pneumatic piping.

Feature

- Effective use at the place of vibration or rocking.
- Long life-span made of plastic.
- Excellent in anti-corrosion and anti-chemicals.

Structural Diagram



Fluid Air(No other gases or liquids) Working Pressure Range 0~150PSI 0~9Kgf/cmf(0~900kPa) Negative Pressure -29.50 in Hg -750mmHg(10Torr) Temperature Range 32~140°F 0~60°C Applicable Tube Material Polyurethane and Nylon



Product Code System



(i) Type

	Metric Size				
Code	TC	TL	TUT	THT	THL
Tumo	STRAIGHT	ELBOW	UNION	TEE	ELBOW
Туре	STRAIGHT	ELBOW	UNION	ROTA	ATION

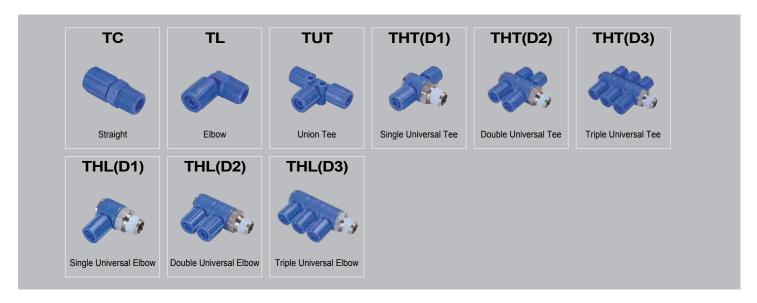
② Tube Dia(ØD)

Code	04	06	08	10	12
Dia	Ø4 ר2.5	Ø6 ר4	Ø8ר5.5	Ø10 ר6.5	Ø12ר8

③ Thread Size(T)

	Thread Size			
Code	01	02	03	04
Size	R1/8	R1/4	R3/8	R1/2

Two -Touch Fitting



Silencers

Product Code System





① Type

② Thread Size

Thread Size	Metric Thread	Tape Pipe Thread			
Code	M5	01	02	03	04
Size	M5	R1/8	R1/4	R3/8	R1/2

TUBE CUTTER

Application

- Safe, efficient, accurate tool for cutting tubing.

Specification

Available Tube	Polyuerthane and Nylon		
Cutting Outer Dia	Ø3.0 ~ Ø12.0		
Material	Polyacetal, Stainless steel		
Standard Color	Blue		

Product Code System



MODEL	W.G(9)	Q'ty/In-Box	
Tube Cutter	30.5	24	



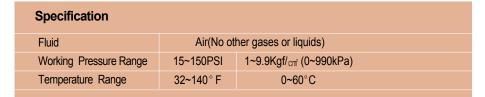
AIR GUN

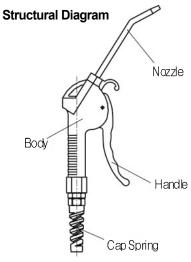
Application

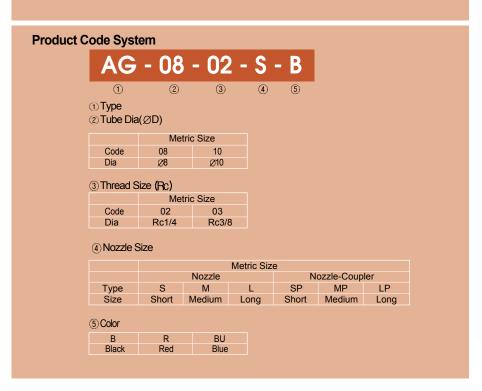
- Used for installation on machines for cleaning debris and particles, best in confined space.

Feature

- Various size of nozzle makes it easy to clean the machines and the equipment.
- Easy control of airflow volume.

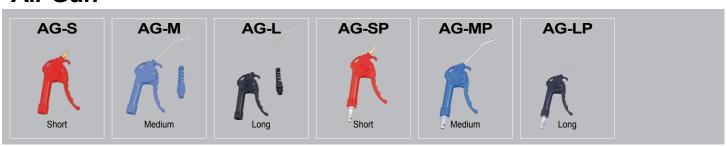








Air Gun





Case In Use

Convenient to clean dangerous parts and to remove foreign substances from the machine(CNC LATHE, AUTOMATIC LATHE, CATAPLUT and PRESS)

POLYURETHANE TUBE

Application

- Used for industrial robots and pneumatic piping.
- Used for various applications by functions.

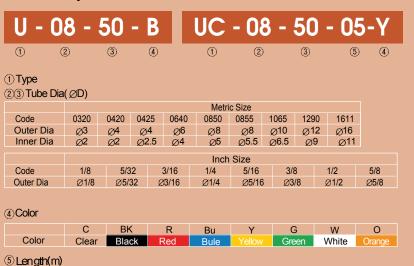
Feature

- Higher flexibility than nylon(PA) helps working achievement.
- Higher flexibility in low temperature.

Specification Air(No other gases or liquids) Fluid Working Pressure Range 0~150PSI 0~9Kgf/cm²(0~900kPa) -750mmHg(10Torr) Negative Pressure -29.50 in Hg 32~140°F -15~60 ℃

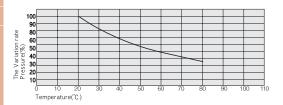
Product Code System

Temperature Range



Working Pressure

- Temperature limits of tube : -40°C ~80°C
- Normal Pressure : Control normal pressure within 1/3 of tube burst pressure.





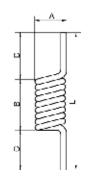




MODEL[OUT-IN]

Metric Size		
MODEL	0. D(mm)	LD(mm)
U-03020	3	2
U-04025	4	2.5
U-06040	6	4
U-08050	8	5
U-08055	8	5.5
U-10065	10	6.5
U-12090	12	9
U-16110	16	11





MODEL [OLIT - Length]

MODEL (OUT -Length)			
Metric Size			
MODEL	O. D(mm)	l D(mm)	Length(m)
UC-0402-15	4	2	1.5
UC-0402-30	4	2	3
UC-0402-45	4	2	4.5
UC-0604-15	6	4	1.5
UC-0604-30	6	4	3
UC-0604-45	6	4	4.5
UC-0805-35	8	5	3.5
UC-0805-50	8	5	5
UC-0805-75	8	5	7.5
UC-0805-100	8	5	10
UC-1065-35	10	6.5	3.5
UC-1065-50	10	6.5	5
UC-1065-75	10	6.5	7.5
UC-1065-100	10	6.5	10
UC-1208-35	12	8	3.5
UC-1208-50	12	8	5
UC-1208-75	12	8	7.5
UC-1208-100	12	8	10



Via Garavina, 2 - Località Piussogno - 23016 Cercino (SO) tel. +39 0342 681298 - fax +39 0342 680004 info@sang-a.it - www.sang-a.it

ITALIAN IMPORTER:

