Hose Swivel Connectors

,

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1. Introduction

APSON Hose-Swivel-Connectors are mainly used in the coatings industry. They connect normal paint and solvent hoses with standard valve blocks and paint changers *or* with other connectors with compatible dimensions.

APSON Hose-Swivel-Connectors (a selection without hose-nuts)

2. Features

- Robust construction, large throughput and good flushability.
- Compatible with all block types according to the drawings of the following sections.
- Quasi-linear throughput rates at pressure changes (for curved connectors).
- Compact dimensions (for angled connectors).

3. Structure and Function

APSON Hose-Swivel-Connectors are usually made of stainless steel and are brazed or welded, depending on the type. Basically, they are available in two versions: **angled** or **bent** . Due to their construction they allow connections with different connection blocks, tube diameters, deflection angles and swivel directions. The desired swivel direction can be adjusted by tightening the nut. For each connector the to be ordered hose nut is dependent on the outer diameter of the hose provided.

Caution

Hoses and fittings as installed, can still hold residual pressure and / or medium (paint, solvent, alkali, o.a.) even after system shutdown. Before handling these parts, make sure they are completely emptied, rinsed and with absolutely no pressure. The relevant safety regulations (fire protection, explosion protection, wearing of appropriate goggles, masks, gloves, protective clothing, etc.) must be followed.

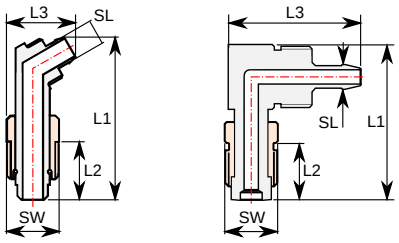
In the following, the hose swivel connectors are mainly classified according to:

- **Type of the deflection angle** : angled or curved.
- **Size of the deflection angle** : 90° right angle, 120° obtuse, or other angle.
- **Type of the thread** : Inches or metric.
- **Type of sealing surface** : 90° conical or 170° resp. 180° "flat".

Main advantage of the **angled** connectors is their **compact type**.

Main advantage of the **bent** connectors is their **quasi-linear behavior** of the throughput rates at pressure changes.

Hose swivel connectors for tubes with small diameters usually have smooth connection ports. Some hose swivel connectors for tubes with larger diameters have bulged ports for secure attachment. At the customer request there are also available connectors with different dimensions according to customer specifications.



APSON Hose Swivel Connectors - General dimensions

Legend: SW = nut wrench size, G = nut thread, L.. = length ..

4. Ordering Data

Annotations:

- The desired hose nut (last column) is additionally to be ordered, because it is not always clear (some nuts can fit on various connectors, depending on the outer diameter of the tube).
- Standard material is stainless steel 1.4305. Parts of other materials or other technical data are available according to customer specification.

5. G1/8" Rectangular

Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflection Angle	SW [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-0933	G1/8"	90°, conical	90°, rectangular	11	6x8	35	13	27	**100-0118**
100-0557	G1/8"	90°, conical	90°, rectangular	11	6x8	35	13	22	**100-0558**

Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflection Angle	SW [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-0557	G1/8"	90°, conical	90°, rectangular	11	6x9	35	13	22	**100-0559**
100-0665	G1/8"	90°, conical	90°, rectangular	11	9x12	63	13	22	**100-0597**
100-0666	G1/8"	90°, conical	90°, rectangular	11	6x12	63	13	22	**100-0597**
100-1429	G1/8"	90°, conical	90°, rectangular	11	4x6	35	13.5	23	**100-1430**

6. G1/4" Rectangular

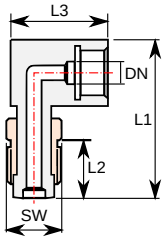
Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflection Angle	SW [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-0560	G1/4"	90°, conical	90°, rectangular	14	6x8	60	13	22	**100-0558**
100-0560	G1/4"	90°, conical	90°, rectangular	14	6x9	60	13	22	**100-0559**
100-0169	G1/4"	90°, conical	90°, rectangular	14	8x12	45	13	25	**100-0170**
100-0698	G1/4"	90°, conical	90°, rectangular	14	6x12	63	13	22	**100-0200**
100-0693	G1/4"	90°, conical	90°, rectangular	14	9x12	63	13	22	**100-0200**
100-0947	G1/4"	90°, conical	90°, rectangular	14	6x8	45	13	25	**100-0118**
100-0949	G1/4"	90°, conical	90°, rectangular	14	8x10	45	13	25	**100-0150**
100-1319	G1/4"	170°, "flat"	90°, rectangular	14	DN6	41	15	35	**100-1314**
100-1320	G1/4"	170°, "flat"	90°, rectangular	14	DN4	41	15	35	**100-1317**

7. G1/4" Obtuse

Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflection Angle	SW [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-0219	G1/4"	90°, conical	120°, optuse	14	4x6	45	13	20.5	**100-0220**
100-0197	G1/4"	90°, conical	120°, obtuse	14	6x8	45	13	20.5	**100-0118**
100-0197	G1/4"	90°, conical	120°, obtuse	14	6x9	45	13	20	**100-0198**

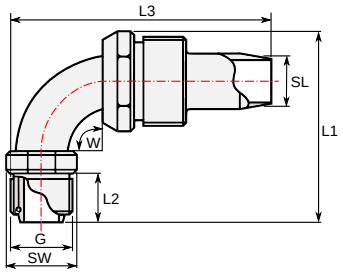
Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflec-tion Angle	SW [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-0585	G1/4"	90°, conical	120°, obtuse	14	6x8	45	15	20	**100-0118**
100-0585	G1/4"	90°, conical	120°, obtuse	14	6x9	45	15	20	**100-0198**
100-0199	G1/4"	90°, conical	120°, obtuse	14	9x12	49	16	20	**100-0200**
100-0599	G1/4"	90°, conical	120°, obtuse	14	9x12	46	16	17	**100-0200**
100-0948	G1/4"	90°, conical	120°, obtuse	14	8x10	45	16	20	**100-0150**

8. Swivel Adaptors 90°



Ord.-Nr. (1 of 2)	Thread Gi	Thread Ga	Sealing Surface	Deflec-tion Angle	SW [mm]	DN	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)
100-1321	G1/4"	G1/4"	170°, "flat"	90°, rec-tangular	14	DN4	41	15	25
100-1322	G1/4"	G1/4"	170°, "flat"	90°, rec-tangular	14	DN6	41	15	25

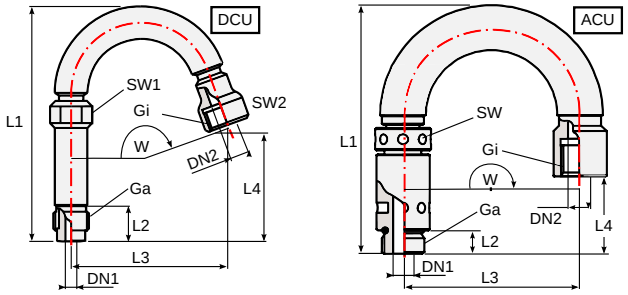
9. Arced Connectors



Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflec-tion Angle	SW1/ SW2 [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-1327	G3/8"	170°, "flat"	90°, Arc	19/27	12x18.5	51	15	67	**100-1315**

Ord.-Nr. (1 of 2)	Thread G	Sealing Surface	Deflec-tion Angle	SW1/ SW2 [mm]	Hose Ø [mm]	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	Hose Nut, Ord.Nr. (2 of 2)
100-1327	G3/8"	170°, "flat"	90°, Arc	19/27	12x20	51	15	67	**100-1337**
100-1327	G3/8"	170°, "flat"	90°, Arc	19/27	12x20.5	51	15	67	**100-1456**

10. Arced Adaptors



Ord.-Nr.	Thread Gi	Thread Ga	Deflec-tion Angle	SW1/ SW2 [mm]	DN1 / DN2	L1 [mm] (approx.)	L2 [mm] (approx.)	L3 [mm] (approx.)	L4 [mm] (approx.)
100-1409 *	G1/4" x 180°	G1/4" x 170°	160°, Arc	14/17	DN6 / DN6	86	13	58	40
100-1348 #	G3/8" x 180°	G3/8" x 170°	180°, Arc	Special §	DN10 / DN13	100	9.5	70	30

*DCU, #ACU, § APSON Special Key, Ordering Nr. Z100-1506

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