Spray Nozzle Global Search System (SGS)

System Description & Data Samples

http://sgs.nozzle-network.com/

This system has been developed with the support of The Japanese Ministry of Economy, Trade and Industry, and Hyogo Prefectural government.

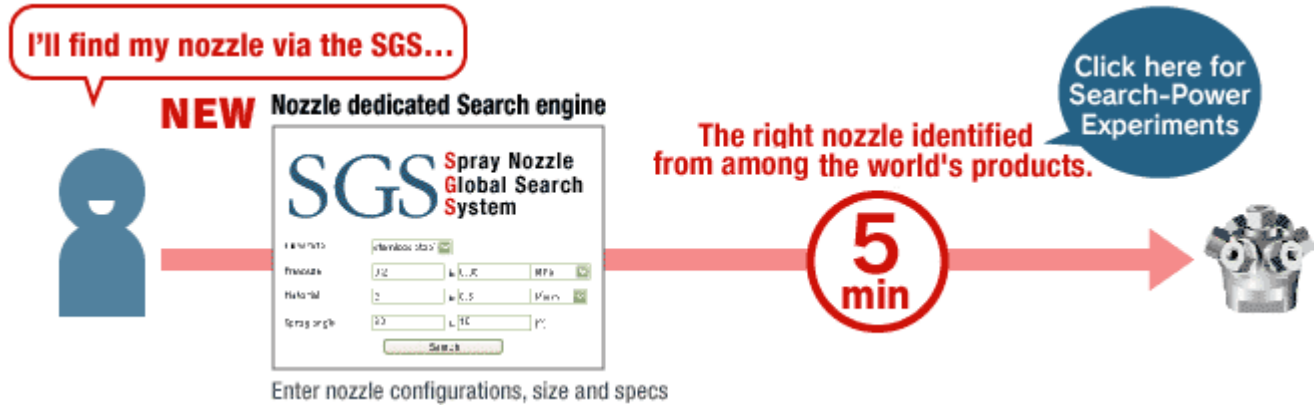
Comprehensive Nozzle Trading Company & Nozzle Information Service

Nozzle Network Co., Ltd.

What is the SGS? Comprehensive Nozzle-Database + Unique Search System

ONE MONTH for nozzle selection?
The SGS gets it done in 5MIN!!

The nozzle that best suits your needs; identified instantly from a vast database of information on the world's nozzle products. Only the Spray Nozzle Global Search System (SGS) offers this.



A Vast Database

Searches Completed in Seconds

An Unrivaled Volume of Detailed Info on Nozzles

Outstanding Usability

1 What is the SGS?

In the past, many hours of research and cross-referencing were required to locate suitable nozzles from printed catalogs. The SGS identifies models that meet your specifications in minutes.
The system's ample database contains data on over 70,000 models of nozzles, and more products and manufacturers are being added all the time.

A library of information at your fingertips! — Searchable Nozzle-Related Information

Many outstanding search functions — Features of the SGS

Invaluable info, delivered rapidly — Search Power Experiments

The SGS does much more for you than just identify and locate the most suitable nozzles for your needs. Its advanced (but user-friendly) functions also provide you with in-depth information and calculations to aid you in the overall design of your spraying system. These functions include a unit converter for converting pressure or flow rate units from the various units used by manufacturers into your preferred units. A pressure/flow rate graph generator is also provided.

Experience the SGS advantage — SGS Case Study

Access invaluable, difficult-to-obtain data — Sample of Data Obtainable

2 Four Types of Searches; Easy to Operate

Simply select from the pre-defined sets of options; enter any further required specifications, and click the [Search] button.

Types of Searches	Description
Standard search	Enter outline specifications of your required nozzle: the SGS will identify the products that meet your (broadly defined) requirements.
Advanced Search	Enter detailed specifications of your required nozzle: the SGS will identify the products that meet your (strictly defined) requirements.
Specifications Search	Enter a nozzle's model number: the SGS will retrieve its supplier and the model's specifications.
Similar Model Search	Enter an existing nozzle's model number: the SGS will identify products whose specifications are similar to those of the existing nozzle.

Guided search process — Easy-to-follow Search Example

To try out the searches, click the button below
Registration not required
SGS Free Trial (limited version)

3 How to use the SGS

Registration is required before using the SGS for the first time (registration is free of charge and without obligation). The easy-to-follow pages will guide you through the registration process and to the Search pages.

Member Registration → Receive ID & Password via e-mail → Log in with ID & Password → Pay utilization charge → **Commence nozzle search**

4 SGS Utilization Charge; Methods of Payment

● Utilization Charges

Session Duration	Utilization Charge
10 min.	JPY 600
30 min.	JPY 900
1 hour	JPY 1,200
2 hours	JPY 1,500
3 hours	JPY 1,800
1 day (24 hours)	JPY 3,000

*No limit on number of searches within the session duration.

When the period of time indicated in the table on the left as **Session Duration** has expired, the session will be terminated automatically.

Samples of Data Obtainable
(Printable for easy inclusion in draft proposals)

● Payment Methods

Credit Card: Receipt will be issued immediately, via e-mail. View Sample

Use the SGS immediately upon completion of the payment procedure.

5 Annual Contract

Pre-pay and save yourself the hassle of making a payment for each usage. Results in considerable cost-per-use savings.

Convenient and money-saving ● ● ● Annual Contract Guide

■ Notes:

This page is intended to give readers a basic understanding of the **Spray Nozzle Global Search System** (SGS). Please read further to find out more about the SGS's capabilities and features.

TRY IT OUT!

SGS Free Trial (limited version)

Experience the search process free of charge!
Useful trial Search.

The search criteria you have entered

(Click on any of these steps to modify related entry.)

Step1 Nozzle category	Step2 Spray pattern	Step3 Required specifications
Nozzles for Liquids		Manufacturer : No preference Pressure : 0.3±0.1 MPa Flow rate : 15±1.5 l/min Spray angle : 90±10°

The following product(s) match(es) the specifications you have entered

Convenient functions

- To display full details of this product and an image of the corresponding page from the manufacturer's printed catalog, click on the **Search code No.**
- To display values in your preferred units, select desired units from the menus provided and click the [Display Converted Values] button.

The Unit Converter may be used to convert between units of measurement commonly used in nozzle design.

Unit Converter

Display values shown in the table below in your preferred units.

Pressure: MPa Flow rate: l/min Free passage diameter: mm Display Converted Values

To sort rows in order of preference, click the button in the table below.
(Click for ascending and for descending.)

Searched results 1 - 15 of approx. 127.

No.	Search code No. Click to display details	Manufacturer	Corp. HQ.	Cat. Lang.	Manufacturer's model No.	Free passage diameter	Pressure	Flow rate	Spray angle * (at Pressure)	Material (orifice)	Connection Standard Size M/F	Valve	Strainer
1	SGS 518-746	KATORI	JPN	jpn	K-11-RC3/8-6.4-SUS304		2.5 kgf/cm²	15.35 l/min	85°(at 2.5kgf/cm²)	Stainless Steel	Rc 3/8 Female	-	-
2	SGS 518-745	KATORI	JPN	jpn	K-11-RC3/8-6.4-BS		2.5 kgf/cm²	15.35 l/min	85°(at 2.5kgf/cm²)	Brass	Rc 3/8 Female	-	-
3	SGS 388-678	S.S.Co.	USA	eng	3/8GA-I22	2.8 mm	3 bar	16.4 l/min	90°(at 1.5bar) *2	Steel	NPT or BSPT 3/8 Female	-	-
4	SGS 523-005	COTEC	JPN	jpn	FB3-6		2 kgf/cm²	14.3 l/min	80°(at 2kgf/cm²)	Brass	G 3/8 Female	-	-
5	SGS 676-313	Yashima	JPN	jpn	3/8AS-6		4 kgf/cm²	13.5 l/min	85°(at 2kgf/cm²) *2	Plastic	Rc 3/8 Female	-	-
6	SGS 640-502	NIIKURA	JPN	jpn	F1/2EX216L-PP	2.25 mm	0.2 MPa	16 l/min	90°(at 0.2MPa)	Plastic	Rc 1/2 Female	-	-
7	SGS 307-633	LECHLER	DEU	eng	422.886.30.CE	5.7 mm	2 bar	16 l/min	89° *1 *2	Brass	BSPT 3/8 Male	-	-
8	SGS 523-044	COTEC	JPN	jpn	MB4-5		3.5 kgf/cm²	15.1 l/min	84°(at 3kgf/cm²) *2	Brass	R 1/2 Male	-	-
9	SGS 641-148	NIIKURA	JPN	jpn	M1/2EX216L-SUS316L	2.25 mm	0.2 MPa	16 l/min	90°(at 0.2MPa)	Stainless Steel	R 1/2 Male	-	-
10	SGS 676-314	Yashima	JPN	jpn	3/8AS-9		3 kgf/cm²	15.5 l/min	93°(at 2kgf/cm²) *2	Plastic	Rc 3/8 Female	-	-
11	SGS 388-672	S.S.Co.	USA	eng	3/8GA-22	2.8 mm	3 bar	16.4 l/min	90°(at 1.5bar) *2	Brass	NPT or BSPT 3/8 Female	-	-
12	SGS 523-004	COTEC	JPN	jpn	FB3-5		3.5 kgf/cm²	15.1 l/min	84°(at 3kgf/cm²) *2	Brass	G 3/8 Female	-	-
13	SGS 518-717	KATORI	JPN	jpn	K-11-R3/8-4.8-BS		4 kgf/cm²	14.15 l/min	80°(at 4kgf/cm²)	Brass	R 3/8 Male	-	-
14	SGS 137-176	BETE	USA	eng	3/8FWTZ39090-7		3 bar	15.3 l/min	90° *2	Stainless Steel	NPT or BSPT 3/8 Female	-	-
15	SGS 518-743	KATORI	JPN	jpn	K-11-RC3/8-5.7-BS		3 kgf/cm²	14.5 l/min	85°(at 3kgf/cm²)	Brass	Rc 3/8 Female	-	-

Search result page : 1 2 3 4 5 6 7 8 9 Next

Please refer to the notes below if an asterisk (*), or a numbered asterisk is displayed in the table above.

* The displayed spray angle should be regarded as being for information purposes only. While nominally constant, spray angle can, in actuality, be influenced by spray distance. Please verify the accuracy of this information by means of the manufacturer's printed catalog, or with the manufacturer.

*1 The displayed spray angle has been calculated on the basis of spray distance and spray width values published in the manufacturer's printed catalog. These calculated values should be regarded as being for information purposes only. Please verify the accuracy of this information by means of the manufacturer's printed catalog, or with the manufacturer.

*2 At the pressure you have entered as your search criterion, a spray angle value has not been provided in the printed catalog of the manufacturer of this product. The spray angle displayed, therefore, is at the pressure published in the catalog (this being the most useful information available).
Please verify the accuracy of this information by means of the manufacturer's printed catalog, or with the manufacturer.

*3 The displayed flow rate/spray angle is for liquids other than water. Please verify the accuracy of this information by means of the manufacturer's printed catalog, or with the manufacturer.

Caution:

Although the nozzle-related information provided herein by Nozzle Network Co., Ltd. is that which is published in the printed catalogs of the manufacturers of the related items, NNC is unable to respond to queries concerning products that have been identified as a result of using the SGS. Moreover, NNC cannot be held liable for any loss or damage arising from the use of information gained through use of this service.
Please be informed, therefore, that full responsibility for verifying any information appearing in these search results lies with the user.

Previous (Step3) Begin New Search (Search-type selection page.) Advanced Search (Refine current search.)

Detailed Specifications of Selected Nozzle

The search criteria you have entered

(Click on any of these steps to modify related entry.)

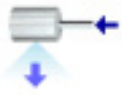
Step1 Nozzle category	Step2 Spray pattern	Step3 Required specifications
Nozzles for Liquids		Manufacturer : No preference Pressure : 0.3±0.1 MPa Flow rate : 15±1.5 l/min Spray angle : 90±10°

Detailed Specifications of Selected Nozzle

Search Code No. SGS 732-300
Nozzle category: Nozzles for Liquids
SGS classification: Full Cone Spray Nozzles

Unit Converter

The Unit Converter may be used to convert between units of measurement commonly used in nozzle design.

Manufacturer	ELZZON
Manufacturer's HQ	JPN
URL	http://sgs.nozzle-network.com/
Catalog language	eng
Product name	***
Manufacturer's model No.	K-1123-Rc3/8-6.40-SUS304
Valve	Without
Strainer	Without
Material of manufacture (orifice)	Stainless Steel
Connection	Thread Rc 3/8 Female
Orifice diameter	6.4 mm 0.252 inch
Free passage diameter	--- mm --- inch
Rated heat resistance	---
Body color	---
Weight (unit or assembly)	0.097 kg 0.0970 kg
Inlet direction	 Fluid flows in from the rear of nozzle body. Outflow is tangential to nozzle body.
Spray pattern	 Full cone spray
Pressure / Flow rate / Spray angle Fluid: Water	**Pressure / Flow rate / Spray angle Chart** (The values colored red are approximations of the search criteria you have entered.) Pressure (kgf/cm²) | Flow rate (l/min) | Spray angle (°)

Convert values shown in the adjoining table into your preferred units
(Select unit --> [Convert] button)

Pressure: kgf/cm²

Flow rate: l/min

Convert

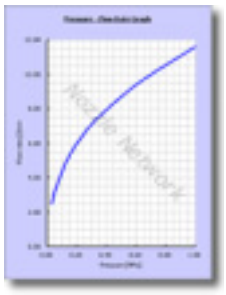
(Display values shown in catalog)

Display

0.3	5.9	70
0.5	7	75
0.7	8.2	80
1	9.7	80
1.5	12	80
2	13.9	85
2.5	15.35	85
3	16.45	85
4	19	80
5	21.4	80

Generate graph from Characteristic Chart!

Pressure - Flow rate Graph



Catalog Page Images

Below: Thumbnail image(s) of the page(s) of the manufacturer's catalog on which this product appears.
Click on a thumbnail image to view the full-sized page.

Catalog cover

P.11

Accessories pages

Click right button to view images of the catalog pages on which accessories for this product appear.

Display Accessories Pages

Get Adobe Reader

Unable to view catalog pages?
Adobe Reader is required to view these *pdf* files (free download).

Caution:

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Contact the manufacturer of this product directly...

E-mail Manufacturer (Outgoing message sample)

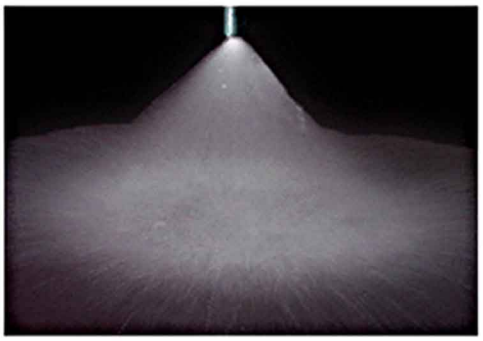
Click on the button below to open a pre-addressed message that can be used to e-mail the manufacturer directly. To facilitate reference to this product, a copy of this (Detailed Specifications of Selected Nozzle) page will be automatically attached to the outgoing message.

Previous (Table of Search Results)

Begin New Search (Search-type selection page.)

Log Out (Exit SGS to Table of Contents.)

Full Cone Spray Nozzle

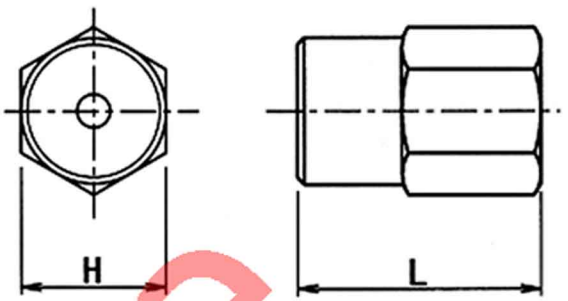


■DESIGN FEATURES

Spray nozzles, which are used to spray air, water, or other fluids, play an essential role in the drying and cooling operations that must be carried out in every industrial process throughout the world.
Most industrial spray nozzles are of either the atomizing or the flood jet type. Dozens of manufacturers produce atomizing nozzles and flood jet nozzles, and while certain companies specialize only in nozzles that produce fine atomization, other companies offer a wide variety of different types, or offer nozzles with special features.
Provided by Nozzle Network Co., Ltd., the Spray Nozzle Global Search System harnesses the power of the Internet to give nozzle users access to the information they need to select the right nozzle from the vast assortment of models available around the world.

■DIMENSIONS & WEIGHT

Model	Dimension (mm)		Connection	Weight (kg)
	L	H		
F1/4NZL	30	Hex. 17	Rc1/4	0.03
F3/8NZL	35	Hex. 21	Rc3/8	0.06
F1/2NZL	44	Hex. 26	Rc1/2	0.12
F3/4NZL	52	Hex. 32	Rc3/4	0.25
F1NZL	65	Hex. 41	Rc1	0.35



■PERFORMANCE DATA

Model No.	Conn.	Min. Dia. mm	Unit	Flow Rate・Spray Angle・Sauter Mean Diameter(SMD)									
			MPa	0.03	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.70	1.00
F1/4NZL53S	Rc 1/4	1.5	l/min	-	1.55	2.15	2.60	3.00	3.60	4.10	4.45	5.15	6.00
			°	-	82	87	90	90	90	91	92	93	95
			μm	-	650	550	500	450	400	350	300	250	200
F3/8NZL55S	Rc 3/8	1.75	l/min	2.00	2.60	3.65	4.35	5.00	5.95	6.80	7.35	8.60	10.0
			°	75	82	87	90	90	90	91	92	93	95
			μm	900	750	650	600	550	450	400	350	300	250
F3/8NZL58S	Rc 3/8	2.0	l/min	3.25	4.15	5.90	7.05	8.00	9.40	10.8	11.6	13.7	16.0
			°	85	86	88	90	90	90	91	92	93	95
			μm	950	800	700	650	600	500	450	400	350	300
F1/2NZL512S	Rc 1/2	2.25	l/min	4.95	6.30	8.75	10.5	12.0	14.2	16.2	17.5	20.6	24.0
			°	85	86	88	90	90	90	91	92	93	95
			μm	1000	850	750	700	650	550	500	450	350	300
F1/2NZL516S	Rc 1/2	3.0	l/min	6.60	8.40	11.5	14.0	16.0	19.1	21.5	23.3	27.4	32.0
			°	85	86	88	90	90	90	91	92	93	95
			μm	1050	900	800	750	700	600	550	500	400	350
F1/2NZL520S	Rc 1/2	3.0	l/min	8.05	10.5	15.8	18.0	20.0	23.0	26.6	28.4	33.1	39.4
			°	85	86	88	90	90	90	91	92	93	95
			μm	1100	950	850	800	750	650	550	500	400	350
F3/4NZL525S	Rc 3/4	3.0	l/min	9.90	13.0	18.8	22.2	25.0	29.1	33.5	36.1	42.1	49.6
			°	85	86	88	90	90	90	91	92	93	95
			μm	1150	1000	900	850	800	700	600	550	400	350
F3/4NZL530S	Rc 3/4	4.0	l/min	11.6	15.5	21.6	26.2	30.0	35.3	40.5	44.1	51.3	60.0
			°	85	86	88	90	90	90	91	92	93	95
			μm	1200	1050	950	900	850	750	650	600	450	400
F3/4NZL535S	Rc 3/4	4.0	l/min	14.3	18.6	26.2	31.1	35.0	41.1	46.9	51.1	59.2	69.6
			°	85	86	88	90	90	90	91	92	93	95
			μm	1250	1050	950	900	850	750	650	600	450	400
F1NZL540S	Rc 1	4.0	l/min	17.2	21.9	30.0	36.1	40.0	47.0	53.2	58.0	66.9	79.2
			°	85	86	88	90	90	90	91	92	93	95
			μm	1300	1100	1000	950	900	800	700	650	500	400
F1NZL542S	Rc 1	4.0	l/min	19.4	24.7	31.6	37.6	42.0	49.5	56.4	62.2	72.7	83.6
			°	85	86	88	90	90	90	91	92	93	95
			μm	1300	1100	1000	950	900	800	700	650	500	400
F1NZL550S	Rc 1	5.5	l/min	24.7	31.3	37.0	44.3	50.0	59.2	67.9	75.7	89.4	100
			°	85	86	88	90	90	90	91	92	93	95
			μm	1350	1150	1050	1000	950	850	750	700	550	450
F1NZL560S	Rc 1	5.5	l/min	27.8	35.6	44.0	53.2	60.0	70.0	78.9	86.3	101	117
			°	85	86	88	90	90	90	91	92	93	95
			μm	1350	1150	1050	1000	950	850	750	700	550	450

SPRAY NOZZLE PRESSURE-FLOW RATE GRAPH

This graph, which is generated automatically and based on the values shown in the manufacturer's printed catalog, is intended to provide reference data only. The program that produced this graph is Nozzle Network Co., Ltd.'s proprietary development. (Pat. pending.) The provision, on demand, of graphs such as this, is one of the features of the Spray Nozzle Global Search System (SGS) http://sgs.nozzle-network.com/

Search Code No. SGS 732-300

Manufacturer: ELZZON

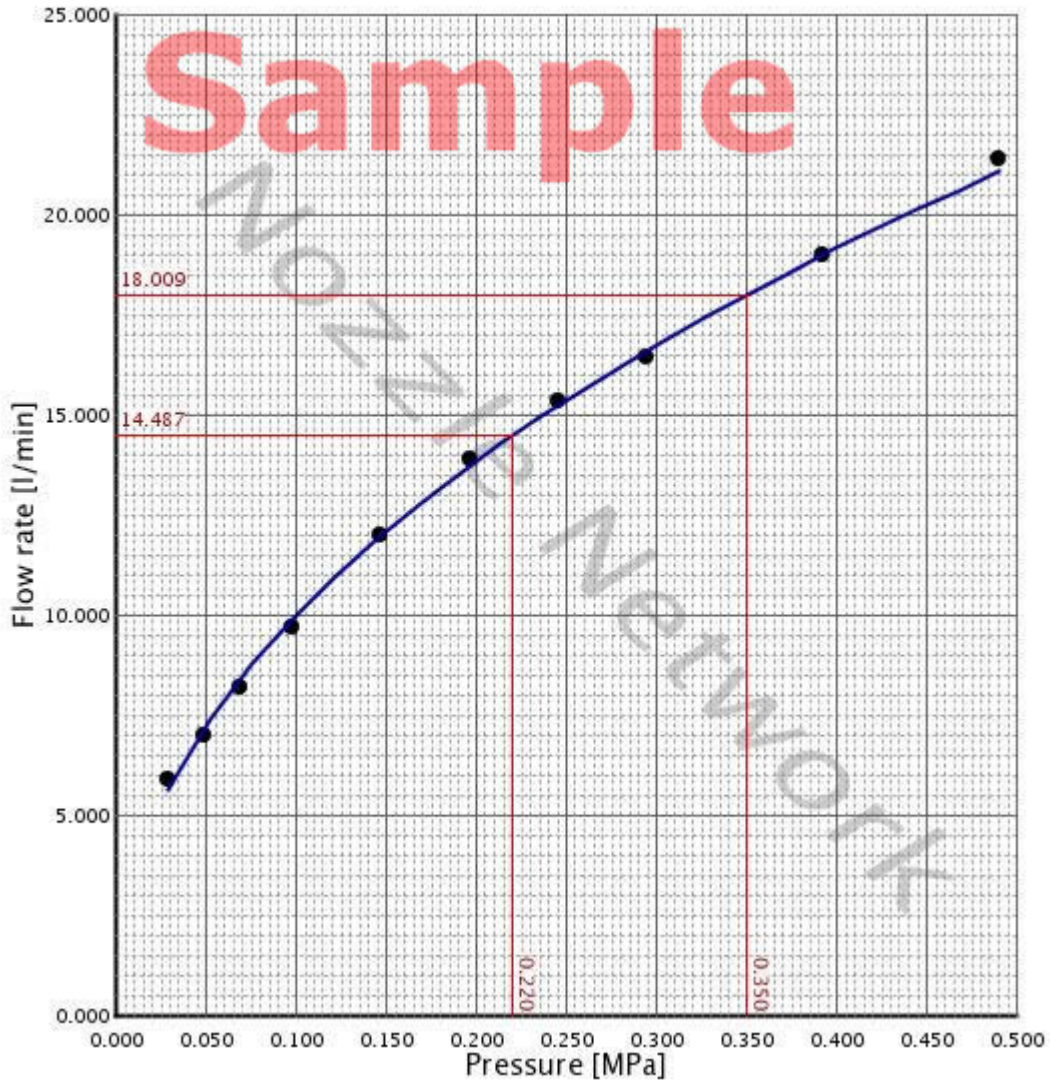
Manufacturer's Model No.: K-1123-Rc3/8-6.40-SUS304

Pressure-Flow rate Chart of Values Shown in Catalog (The black points in the graph represent the following values.)										
Pressure(MPa)	0.029	0.049	0.069	0.098	0.147	0.196	0.245	0.294	0.392	0.490
Flow rate(l/min)	5.900	7.000	8.200	9.700	12.000	13.900	15.350	16.450	19.000	21.400

Click on any point in the curve, or in the horizontal or vertical axis of the graph; the SGS can display up to five sets of values (and red guidance lines) in the graph simultaneously. Click on a guidance line to clear and reset.

Fluid: Water

Click here to enter a characteristic value directly.



Caution: Each point in this graph is derived from values indicating the relationship between pressure and flow rate shown in the manufacturer's printed catalog. The curve is plotted by means of a formula that projects between the known values. This graph, which is provided by Nozzle Network Co., Ltd. is intended to provide reference data only. NNC does not warrant the performance of this commodity.
Nozzle Network Co., Ltd. has applied for a patent for this Web-based graph service system.

ATIKA

A file such as that shown in the example below will automatically be generated and attached to the outgoing message

Close