

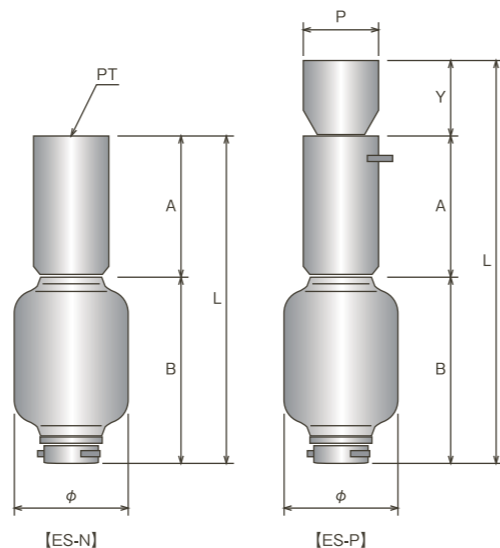
SPECIFICATIONS

Series	ES																	
Spray capacity code	01		02		03		05		1		2		3		4		5	
Connection type code	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P
Connection type	Thread	Pinning	Thread	Pinning	Thread	Pinning	Thread	Pinning	Thread	Pinning	Thread	Pinning	Thread	Pinning	Thread	Pinning	Thread	Pinning
Pipe connection size	1/8F (PT)	φ10.5	1/8F (PT)	φ13.8	1/4F (PT)	φ17.3	3/8F (PT)	φ21.7	3/8F (PT)	φ21.7	1/2F (PT)	φ25.4	3/4F (PT)	φ38.1	1F (PT)	φ38.1	1 1/2F (PT)	φ50.8
Pipe connection size code	1/8F	φ10	1/8F	φ13	1/4F	φ17	3/8F	φ21	3/8F	φ21	1/2F	φ25	3/4F	φ38	1F	φ38	1 1/2F	φ50
Mass (g)	20	25	35	50	75	90	155	210	185	235	260	315	605	660	925	1060	1640	1820
Spray capacity (L/min) at 0.3MPa	7		13		20		31		42		70		150		210		440	
Pressure range (MPa)	0.05~1.0						0.1~1.0											
Spray pattern	360° spray, 180° upward spray, 180° downward spray																	
Rotation speed (rpm)	120 (at 0.3MPa)																	
Material	SUS316L (Shaft bearing: PTFE)						SUS304/SUS316L (Shaft bearing: PTFE)											

Note: Specifications are subject to change without prior notice for purposes of product improvement.
 Note: The above spray capacities and rotation speed are for reference only.

DIMENSIONS

Spray capacity code	Connection type code	L	φ	A	B	Y	P	PT
01	N	38	16	16	22	—	—	1/8"
	P	48						10
02	N	53	20	24.5	28.5	—	—	1/8"
	P	73						20
03	N	65	25	30	35	—	—	1/4"
	P	90						25
05	N	97	30	45	52	—	—	3/8"
	P	127						30
1	N	115	31.5	55	60	—	—	3/8"
	P	145						30
2	N	123	41.5	55	68	—	—	1/2"
	P	153						30
3	N	139	60	60	79	—	—	3/4"
	P	174						35
4	N	163	75	70	93	—	—	1"
	P	198						35
5	N	180	88	75	105	—	—	1 1/2"
	P	225						45



[Unit: mm] (Dimensions L to P)

HOW TO ORDER Please inquire or order for a specific nozzle using this coding system, referring to the above SPECIFICATIONS.

(Example) 1/8F ES 01N S316L (360)

Pipe connection size	Series	Spray capacity code	Connection type code	Material	Spray pattern
1/8F	ES	01	N	S316L	(360)
<ul style="list-style-type: none"> ■ 1/8~1 1/2F ■ φ10~50 		<ul style="list-style-type: none"> ■ 01 ■ 1 ■ 02 ■ 2 ■ 03 ■ 3 ■ 05 ■ 4 ■ 5 	<ul style="list-style-type: none"> ■ N ■ P 	<ul style="list-style-type: none"> ■ S304 (only for spray capacity code 05 to 5) ■ S316L 	<ul style="list-style-type: none"> ■ 360 ■ 180 upward ■ 180 downward

Simple, compact design for CIP cleaning

Rotating Cleaning Nozzles for Tanks/Containers

ES series



H. IKEUCHI & CO., LTD.

Headquarters
 Daiichi Kyogyo Bldg., 1-15-15, Awaza
 Nishi-ku, Osaka 550-0011, Japan
 Tel: 81-6-6538-4015 Fax: 81-6-6538-4022
 E-mail: overseas@kirinoikeuchi.co.jp
 URL: http://www.kirinoikeuchi.co.jp/eng/

IKEUCHI (SHANGHAI) CO., LTD.
 Room C, 21/F, Electrical & Mechanical Bldg., 600 Hengfeng Road, Shanghai 200070, P.R.China
 Tel: 86-21-6140-9731 Fax: 86-21-6123-4239 mist@kirinoikeuchi.com http://www.kirinoikeuchi.com/
Tianjin Branch Tel: 86-22-2320-1676 Fax: 86-22-2320-1675

IKEUCHI USA, INC.
 8110 Beckett Center Drive, West Chester, OH 45069 USA
 Tel: 1-513-942-3060 Fax: 1-513-942-3064 info@ikeuchiusa.com http://www.ikeuchiusa.com/

IKEUCHI EUROPE B.V.
 Asterweg 17 A6, 1031 HL Amsterdam, The Netherlands
 Tel: 31-20-820-2175 Fax: 31-20-820-2176 info@ikeuchieurope.com http://www.ikeuchieurope.com/

IKEUCHI TAIWAN CO., LTD.
 11 F-1, No.27, Sec.1, Chung Shan N. Rd., Taipei, 10441 Taiwan, R.O.C.
 Tel: 886-2-2511-6289 Fax: 886-2-2541-6392 sales@ikeuchi.com.tw http://www.ikeuchi.com.tw/

PT. IKEUCHI INDONESIA
 Ruko Easton Jalan Gunung Panderman Blok E No.9, Lippo Cikarang Kel. Cibatu Kec., Cikarang Selatan Bekasi 17550 Indonesia
 Tel: 62-21-2909-3246 Fax: 62-21-2909-3247 sales@ikeuchi.co.id http://www.kirinoikeuchi.co.jp/ijk/

H. IKEUCHI & CO., LTD.

FEATURES

Simple structure

- No external power needed as rotation is driven solely by the flow of the cleaning fluid.
- Simple design ensures reliable rotating cleaning, while also being compact (min. outer diameter $\phi 16\text{mm}$).
- Easy maintenance due to low number of parts. Lengthening the period of use is possible by replacing the upper and lower shaft bearings.

Sanitary

- Internal design greatly reduces dripping from the nozzle tip. The unit is self-cleaning and hygienic.

Mountable in any direction

- ES nozzles can be mounted sideways, upwards, or in any direction.

Wide range of spray capacity

- Available in 9 types ranging from 7 to 440L/min (at 0.3MPa), suitable for a great range of tank sizes.

2 types of connection

- Select from Thread connection [type N] or Pin connection [type P] for a more sanitary option.

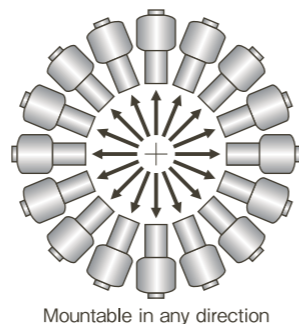


PHOTO OF SPRAY



Rotating flat spray pattern achieves a complete, uniform cleaning. (This photo is 360° spray type.)

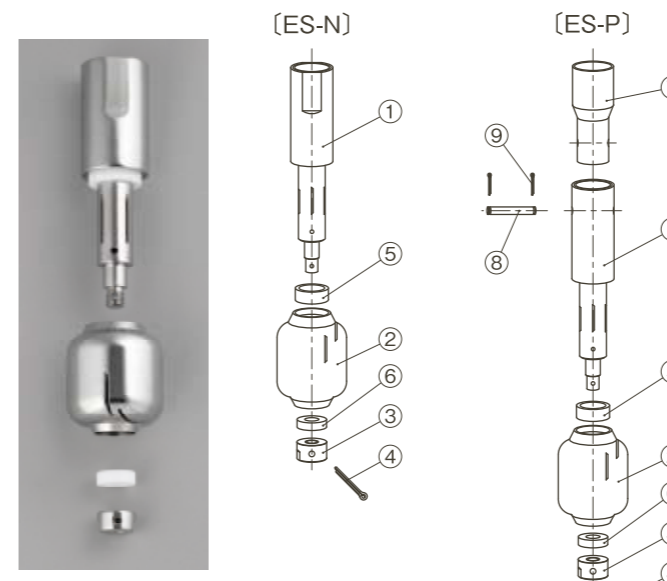
PHOTO OF SLIT



Ingenuous slit design eliminates blind spots and performs self-cleaning.

COMPONENTS

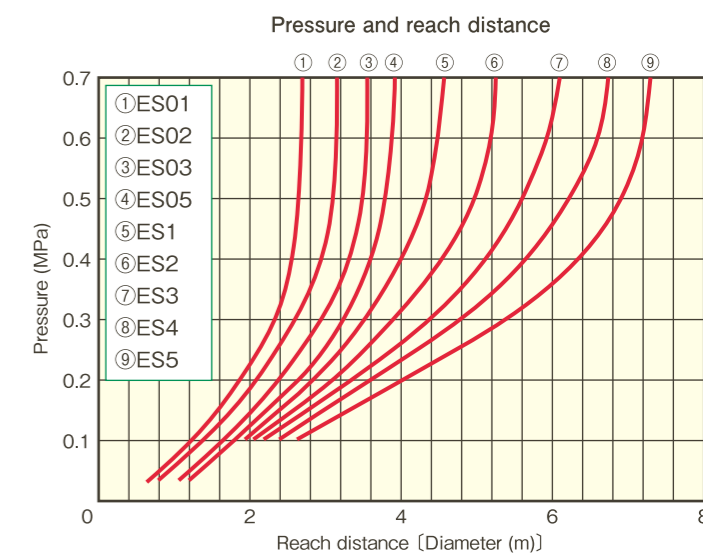
Simple structure with rotation driven solely by water pressure. Easy to disassemble and clean the components.



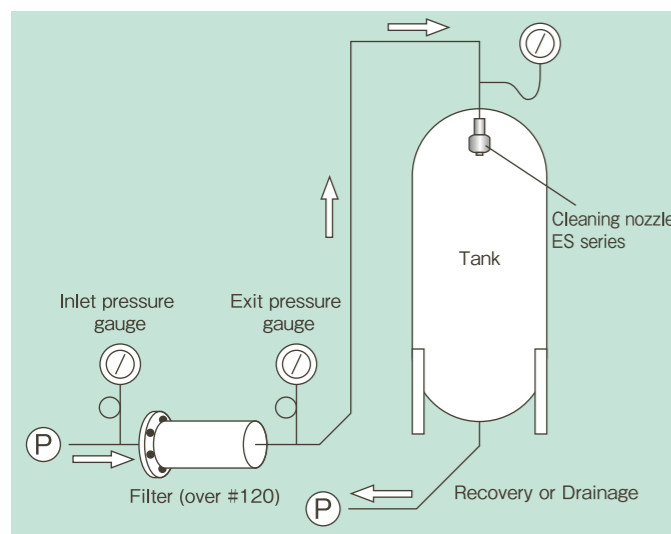
- ① Connecting adaptor ② Nozzle body ③ Hub
- ④ Lock pin ⑤ Shaft bearing (upper) ⑥ Shaft bearing (lower)
- ⑦ Welded connecting pipe ⑧ Connecting pin ⑨ Side pin

REACH DISTANCE

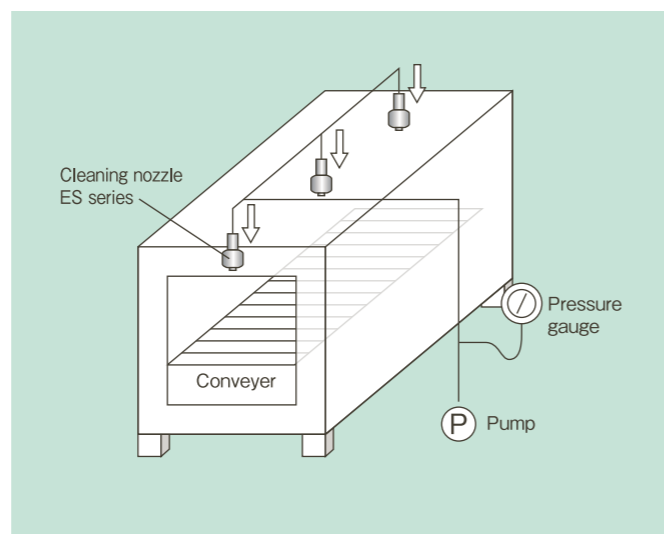
Please check whether the required reach distance is obtained at the chosen conditions (setting pressure and spray capacity code) in the chart below. If not, please choose a different pressure and/or spray capacity code.



EXAMPLE USES



Tank Cleaning

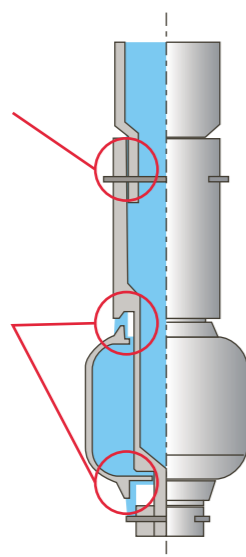


Cleaning inside Storage Areas

SANITARY DESIGN

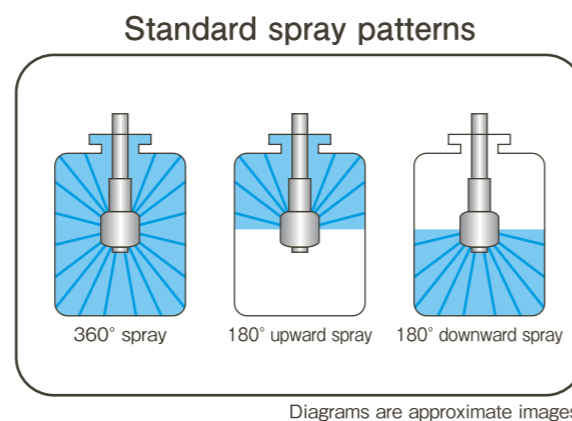
- ES-[type P] series is highly sanitary, having no threads in the flow passage, thus no grooves to collect contaminants.

- Spraying liquid flows from the gaps between the connecting adaptor and nozzle body and keeps the nozzle surface clean. (Common to both ES [type N] and [type P])



SPRAY PATTERN

There are 3 standard spray patterns. Please select the pattern for your application and purpose.



SPRAY CAPACITY

9 types are available, ranging from 7 to 440L/min (at 0.3MPa) for both ES-[type N] and ES-[type P]. Select a suitable spray capacity code according to the setting pressure and required flow rate.

