Oval Spray Nozzle





Features

- Relatively small droplet.
- Wide spray area.

Applications

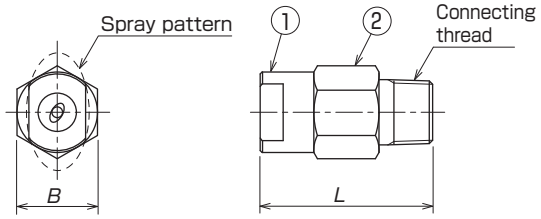
- Cooling of steel sheets, rollers, and hot coils.
- Secondary cooling in continuous casting processes.
- Various washing purposes.

Materials

- 303 Stainless steel
- Brass

Shapes and dimensions

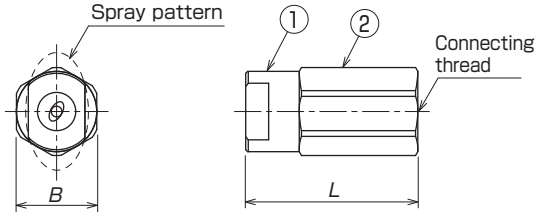
KSE, Separate type



Model	Dimension [mm]		Connecting thread	Weight [g]
	B	L		
1/4 KSE	21	45	R 1/4	55
3/8 KSE	21	45	R 3/8	85
1/2 KSE	29	60	R 1/2	205
3/4 KSE	32	68	R 3/4	265

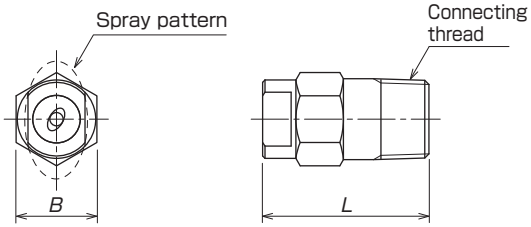
No.	Part name
1	Nozzle body
2	Adapter

KSE····H, Separate type



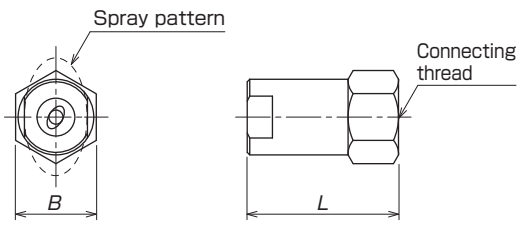
Model	Dimension [mm]		Connecting thread	Weight [g]
	B	L		
1/4 KSE····H	21	45	Rc 1/4	55
3/8 KSE····H	21	45	Rc 3/8	85
1/2 KSE····H	29	60	Rc 1/2	205
3/4 KSE····H	32	68	Rc 3/4	265

KSE····S, Integral type



Model	Dimension [mm]		Connecting thread	Weight [g]
	B	L		
1/4 KSE····S	14	28	R 1/4	22
3/8 KSE····S	17	35	R 3/8	55
1/2 KSE····S	22	42	R 1/2	90
3/4 KSE····S	27	54	R 3/4	185
1 KSE····S	35	65	R 1	350

KSE····HS, Integral type



Model	Dimension [mm]		Connecting thread	Weight [g]
	B	L		
1/4 KSE····HS	17	38	Rc 1/4	50
3/8 KSE····HS	21	45	Rc 3/8	80
1/2 KSE····HS	29	60	Rc 1/2	210
3/4 KSE····HS	32	60	Rc 3/4	220
1 KSE····HS	41	75	Rc 1	440

*NPT thread is also available.

Model and Model Number representing

1/4 K S E — 0490 U

- 1/4 — Thread size
- K S E — Material: S - Stainless steel; B - Brass
- 0490 — Model number
- U — Water flow distribution: U - Uniform distribution; No symbol - Normal distribution

● Standard type model number list

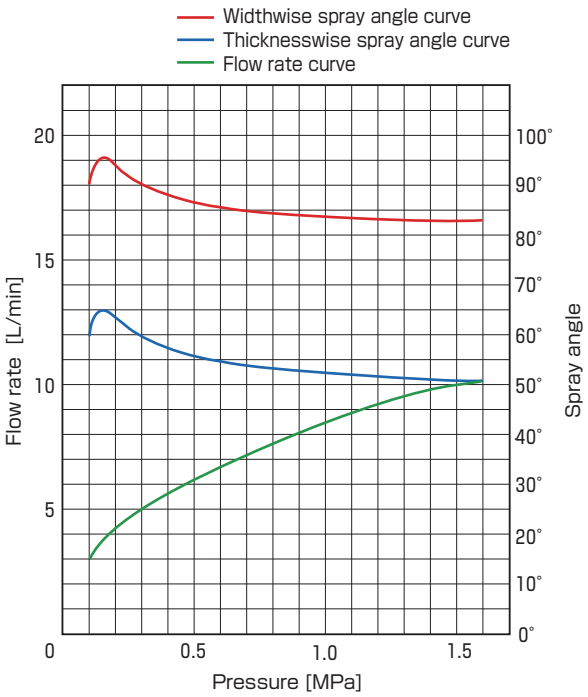
●: Model availability

Thread size	Model				Uniform distribution	Model number	Minimum orifice diameter [mm]	Air flow rate [L/min] at following pressure [MPa]									Spray angle at 0.3 MPa (longer direction)
	Male		Female					0.1	0.15	0.2	0.3	0.4	0.5	0.7	1.0	1.5	
	KSE	KSE ···S	KSE ···H	KSE ···HS													
1/4	●	●	●	●	●	0265	0.8	1.25	1.49	1.68	2.0	2.3	2.5	2.9	3.4	4.0	65°
	●	●	●	●	●	0275	0.8	1.25	1.49	1.68	2.0	2.3	2.5	2.9	3.4	4.0	75°
	●	●	●	●	●	0290	0.8	1.25	1.49	1.68	2.0	2.3	2.5	2.9	3.4	4.0	90°
	●	●	●	●	●	0365	1.0	1.87	2.2	2.5	3.0	3.4	3.7	4.3	5.0	6.0	65°
	●	●	●	●	●	0375	1.0	1.87	2.2	2.5	3.0	3.4	3.7	4.3	5.0	6.0	75°
	●	●	●	●	●	0390	1.0	1.87	2.2	2.5	3.0	3.4	3.7	4.3	5.0	6.0	90°
	●	●	●	●	●	0465	1.2	2.5	3.0	3.4	4.0	4.5	5.0	5.8	6.7	8.0	65°
	●	●	●	●	●	0475	1.2	2.5	3.0	3.4	4.0	4.5	5.0	5.8	6.7	8.0	75°
	●	●	●	●	●	0490	1.2	2.5	3.0	3.4	4.0	4.5	5.0	5.8	6.7	8.0	90°
3/8	●	●	●	●	●	1565	1.3	3.1	3.7	4.2	5.0	5.7	6.2	7.2	8.4	10.0	65°
	●	●	●	●	●	0575	1.3	3.1	3.7	4.2	5.0	5.7	6.2	7.2	8.4	10.0	75°
	●	●	●	●	●	0590	1.3	3.1	3.7	4.2	5.0	5.7	6.2	7.2	8.4	10.0	90°
	●	●	●	●	●	0665	1.4	3.7	4.5	5.0	6.0	6.8	7.5	8.6	10.1	12.0	65°
	●	●	●	●	●	0675	1.4	3.7	4.5	5.0	6.0	6.8	7.5	8.6	10.1	12.0	75°
	●	●	●	●	●	0690	1.4	3.7	4.5	5.0	6.0	6.8	7.5	8.6	10.1	12.0	90°
	●	●	●	●	●	0765	1.5	4.4	5.2	5.9	7.0	7.9	8.7	10.1	11.8	14.0	65°
	●	●	●	●	●	0775	1.5	4.4	5.2	5.9	7.0	7.9	8.7	10.1	11.8	14.0	75°
	●	●	●	●	●	0790	1.5	4.4	5.2	5.9	7.0	7.9	8.7	10.1	11.8	14.0	90°
	●	●	●	●	●	0865	1.6	5.0	5.9	6.7	8.0	9.1	10.0	11.5	13.4	16.0	65°
	●	●	●	●	●	0875	1.6	5.0	5.9	6.7	8.0	9.1	10.0	11.5	13.4	16.0	75°
	●	●	●	●	●	0890	1.6	5.0	5.9	6.7	8.0	9.1	10.0	11.5	13.4	16.0	90°
	●	●	●	●	●	0965	1.8	5.6	6.7	7.6	9.0	10.2	11.2	13.0	15.1	18.0	65°
	●	●	●	●	●	0975	1.8	5.6	6.7	7.6	9.0	10.2	11.2	13.0	15.1	18.0	75°
	●	●	●	●	●	0990	1.8	5.6	6.7	7.6	9.0	10.2	11.2	13.0	15.1	18.0	90°
	●	●	●	●	●	1065	1.9	6.2	7.4	8.4	10.0	11.3	12.5	14.4	16.8	20.0	65°
	●	●	●	●	●	1075	1.9	6.2	7.4	8.4	10.0	11.3	12.5	14.4	16.8	20.0	75°
	●	●	●	●	●	1090	1.9	6.2	7.4	8.4	10.0	11.3	12.5	14.4	16.8	20.0	90°
	●	●	●	●	●	1195	2.0	6.9	8.2	9.2	11.0	12.5	13.7	15.8	18.5	22.0	65°
	●	●	●	●	●	1175	2.0	6.9	8.2	9.2	11.0	12.5	13.7	15.8	18.5	22.0	75°
	●	●	●	●	●	1190	2.0	6.9	8.2	9.2	11.0	12.5	13.7	15.8	18.5	22.0	90°
	●	●	●	●	●	1265	2.1	7.5	8.9	10.1	12.0	13.6	15.0	17.3	20.2	24.0	65°
	●	●	●	●	●	1275	2.1	7.5	8.9	10.1	12.0	13.6	15.0	17.3	20.2	24.0	75°
	●	●	●	●	●	1290	2.1	7.5	8.9	10.1	12.0	13.6	15.0	17.3	20.2	24.0	90°
	●	●	●	●	●	1565	2.3	9.4	11.1	12.6	15.0	17.0	18.7	21.6	25.2	30.0	65°
	●	●	●	●	●	1575	2.3	9.4	11.1	12.6	15.0	17.0	18.7	21.6	25.2	30.0	75°
	●	●	●	●	●	1590	2.3	9.4	11.1	12.6	15.0	17.0	18.7	21.6	25.2	30.0	90°
1/2	●	●	●	●	●	1965	2.5	11.9	14.1	16.0	19.0	21.5	23.7	27.4	31.9	38.0	65°
	●	●	●	●	●	1975	2.5	11.9	14.1	16.0	19.0	21.5	23.7	27.4	31.9	38.0	75°
	●	●	●	●	●	1990	2.5	11.9	14.1	16.0	19.0	21.5	23.7	27.4	31.9	38.0	90°
	●	●	●	●	●	2365	2.7	14.4	17.1	19.3	23.0	26.0	28.7	33.1	38.6	46.0	65°
	●	●	●	●	●	2375	2.7	14.4	17.1	19.3	23.0	26.0	28.7	33.1	38.6	46.0	75°
	●	●	●	●	●	2390	2.7	14.4	17.1	19.3	23.0	26.0	28.7	33.1	38.6	46.0	90°
3/4	●	●	●	●		2570	2.8	15.6	18.6	21.0	25.0	28.3	31.2	36.0	42.0	50.0	65°
	●	●	●	●		2590	2.8	15.6	18.6	21.0	25.0	28.3	31.2	36.0	42.0	50.0	75°
	●	●	●	●		3070	3.1	18.7	22.3	25.2	30.0	34.0	37.4	43.2	50.4	60.0	90°
	●	●	●	●		3090	3.1	18.7	22.3	25.2	30.0	34.0	37.4	43.2	50.4	60.0	65°
	●	●	●	●		3570	3.4	21.8	26.0	29.4	35.0	39.6	43.6	50.4	58.8	70.0	75°
	●	●	●	●		3590	3.4	21.8	26.0	29.4	35.0	39.6	43.6	50.4	58.8	70.0	90°
1		●		●		4070	3.7	25.0	29.7	33.6	40.0	45.3	49.9	57.6	67.2	80.0	70°
		●		●		4090	3.7	25.0	29.7	33.6	40.0	45.3	49.9	57.6	67.2	80.0	90°
		●		●		5070	4.3	31.2	37.1	42.0	50.0	56.6	62.3	72.0	84.0	100	70°
		●		●		5090	4.3	31.2	37.1	42.0	50.0	56.6	62.3	72.0	84.0	100	90°
		●		●		7070	4.9	43.7	52.0	58.8	70.0	79.3	87.3	101	118	140	70°
		●		●		7090	4.9	43.7	52.0	58.8	70.0	79.3	87.3	101	118	140	90°

Performance data

Characteristic curves

Nozzle model number 3/8 KBE 0590 HU



Flow distribution

Nozzle model number 3/8 KBE 0590 HU
Spray distance 300 mm

