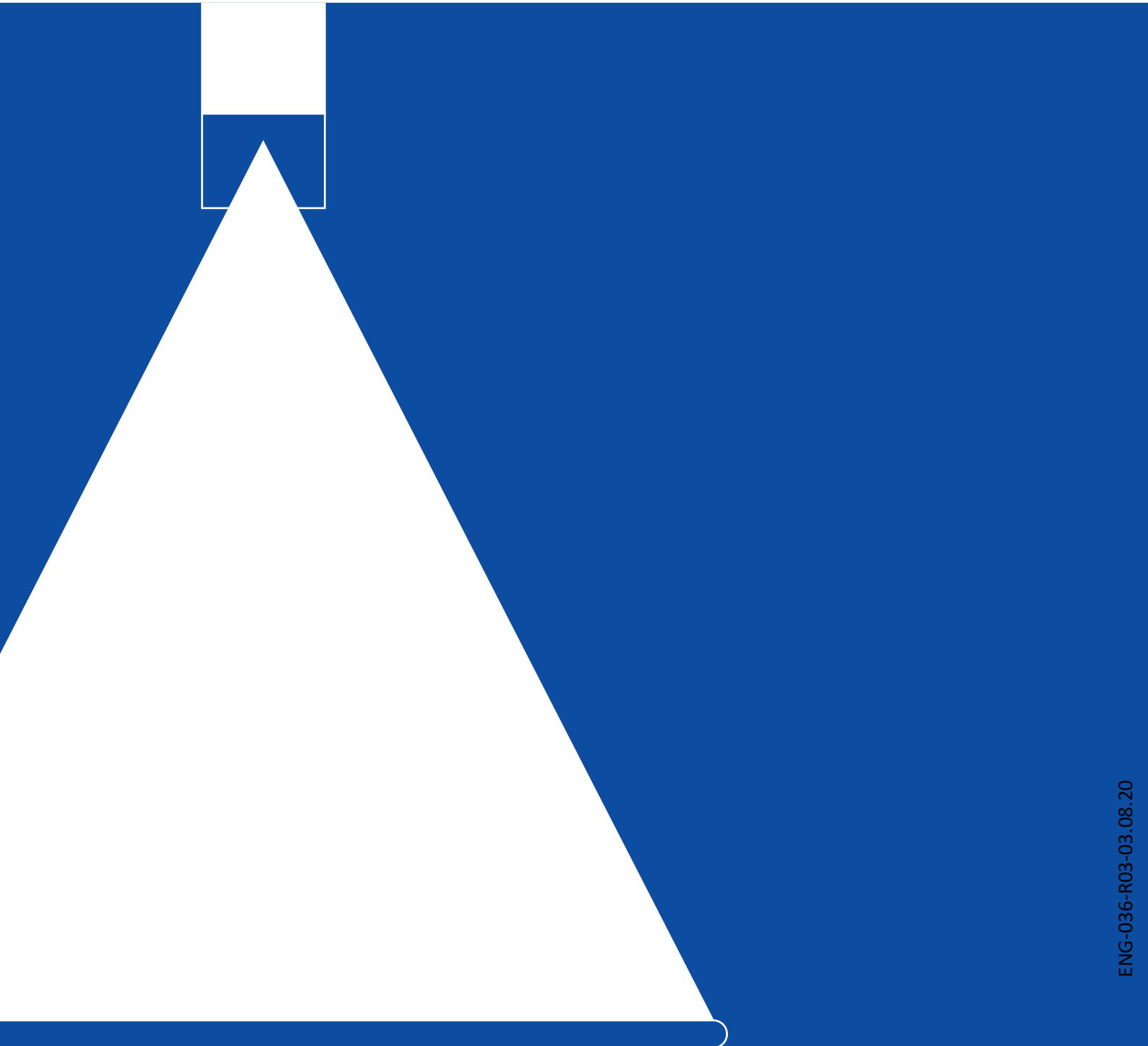


CHAPTER 6

◆◆ Deflector Nozzles



◆ ABOUT US

We Are Here to Help

• Welcome to SPADFLOW

facing the **Challenges** of new industries and emerging markets.

• Spray Technologies

with over **Thousands of Spray Nozzle Types** SPADFLOW has become Iran's leading producer.

• From Design to Installation

with **Skilled** engineers and project managers, SPADFLOW is providing consultancy and support services.

• Knowledge and Experience

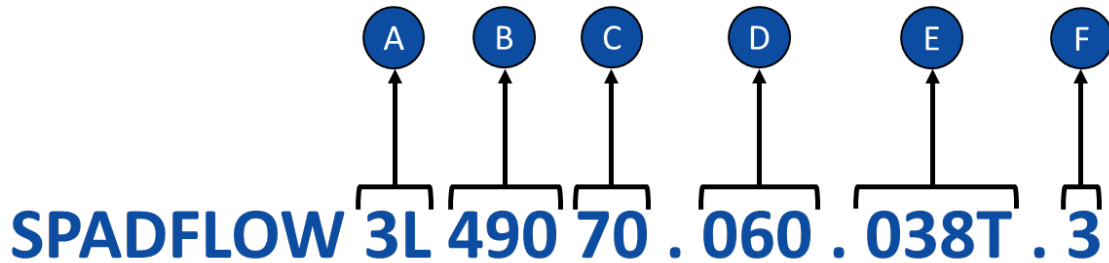
as an **Expert** on spray technology, SPADFLOW is at the forefront of production and innovation.





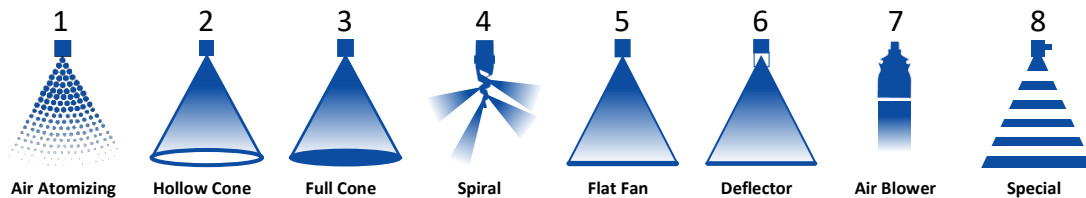
PRODUCT NUMBERS

Everything You Need to Know



A

Nozzle Type (Spray Pattern)



B

Nozzle Series

C

Flow Rate Rank

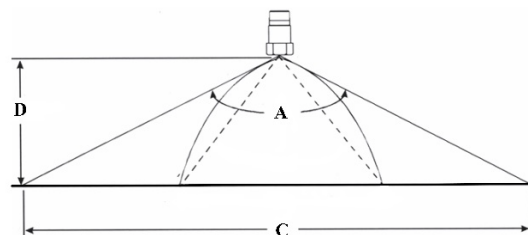
The flow rate rank is relative and depends on the respective nozzle type. The exact value is mentioned in tables on the product pages.

D

Spray Angle

Theoretical spray angle is mentioned in tables on the product pages. Actual spray angle depends on installation and alignment.

- A = Theoretical Spray Angle
- D = Spray Distance
- C = theoretical Spray Coverage



PRODUCT NUMBERS

Everything You Need to Know

E

Connection

1/8" to 4" connections. The exact specification is mentioned in tables on the product pages.

T = BSBT Thread Type Connection

P = BSPP Thread Type Connection

N = NPT Thread Type Connection

R = Retaining Nut

F

Material

Material	Code	Material	Code
Brass	1	Polyvinylchloride	PVC
AISI 304/304L Stainless Steel	2	Polypropylene	PP
AISI 316/316L Stainless Steel	3	Polyamide	PA
AISI 310 Stainless Steel	4	Polyvinylidene fluoride	PVDF
AISI 321 Stainless Steel	5	Polytetrafluorethylene	PTFE
AISI 420 Stainless Steel	6	Polyoxymethylene	POM
Tungsten Carbide	TN	Nitrile Butadiene Rubber	NBR
Phosphor Bronze	CuSn	Polylactic Acid	PLA
Copper	Cu	Acrylonitrile Butadiene Styrene	ABS
Titanium	TI	Nylon Polyamide	PA6
Aluminum	AL	Polycarbonate	PC

Ø B (Equivalent Bore Diameter)

Applies to elliptical discharge holes of flat fan nozzles. A cylindrical hole with a diameter A has the same surface area as the ellipse.

Ø E (Narrowest Free Cross Section)

Important Characteristics for determining the pre-filtration of a nozzle. Can be less than a due to several swirl ducts.

Conversion Formula: $K \text{ factor} \times \sqrt{P(\text{bar})} = Q \text{ (l/min)}$

All flow rate data in this catalogue is based on measurements with water,

Spray angle (α)	Code	Connection Size [inch]	Ø B [mm]	Ø E [mm]	Flow rate (Q) [l/min]						
					Pressure (P) [bar]						
					0.5	1.0	2.0	3.0	5.0	7.0	10.0
45°	3L 490 40 . 045	1/8"	1.25	1.25	0.57	0.76	1.00	1.18	1.44	1.65	1.90
	3L 490 60 . 045	1/4"	2.00	2.00	1.81	2.39	3.15	3.70	4.54	5.20	6.00
	3L 490 70 . 045	3/8"	2.65	2.65	3.22	4.24	5.60	6.59	8.08	9.24	10.66
	3L 490 78 . 045	1/2"	3.45	3.45	5.17	6.82	9.00	10.58	12.98	14.85	17.12
60°	3L 490 40 . 060	1/8"	1.15	1.15	0.57	0.76	1.00	1.18	1.44	1.65	1.90
	3L 490 80 . 060	3/8"	3.70	3.70	5.74	7.58	10.00	11.76	14.43	16.51	19.04
	3L 490 88 . 060	1/2"	4.65	4.65	9.19	12.13	16.00	18.82	23.08	26.41	30.46
	3L 490 96 . 060	3/4"	5.80	5.80	14.36	18.95	25.00	29.40	36.07	41.26	47.59
	3L 491 08 . 060	1"	8.15	8.15	28.72	37.89	50.00	58.80	72.14	82.53	95.18

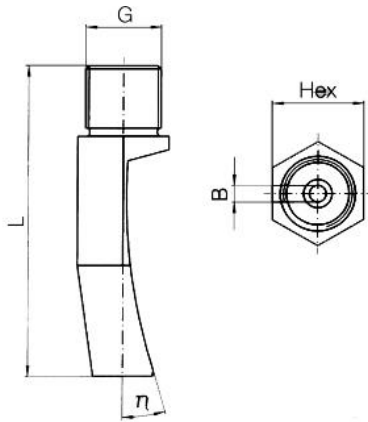
SPADFLOW spray nozzles are manufactured with the highest precision and undergo permanent quality checks. However, production-related tolerances can affect the spray angle, flow rate, droplet size and droplet distribution.



SPADFLOW 6L 688/689

Powerful Deflector Nozzle

Webpage
+ STP



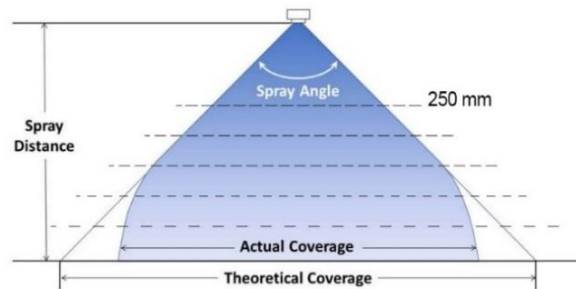
Size	Conn. code			Weight
	BSPT	BSPP	NPT	
3/8"	038T	038P	038N	150 gr
1/2"	012T	012P	012N	220 gr
3/4"	034T	034P	034N	306 gr

Material*	Code
Brass	1
S.S.304	2
S.S.316	3

α	Spray coverage
	@ 250 mm
15°	65 mm
30°	135 mm
45°	220 mm

Properties:

- High Resistance to Physical Damage
- Sharp Flat-Fan Spray
- Not prone to clogging



Spray angle (α)	Code	η	Connection** [Inch]	B Ø [mm]	Flow rate [l/min]			Dimensions						
					P [bar]			L [mm]			Hex [mm]			
					1.0 <i>K factor</i>	2.0	5.0	R 3/8	R 1/2	R 3/4	R 3/8	R 1/2	R 3/4	
15°	5L 688 92 . 015	10°	1/2"	4.7	14.14	20	31.62	-	103	-	-	-	22	-
	5L 689 00 . 015	9°	3/4"	6	22.27	31.5	49.81	-	-	141	-	-	-	27
	5L 689 12 . 015	9°	3/4"	8.6	44.55	63	99.61	-	-	168	-	-	-	27
30°	5L 688 92 . 030	17°	1/2"	4.7	14.14	20	31.62	-	73	-	-	22	-	
	5L 689 00 . 030	17°	3/4"	6	22.27	31.5	49.81	-	-	86,5	-	-	27	
	5L 689 08 . 030	15°	1/2" - 3/4"	7.6	35.36	50	79.06	-	-	97,5	-	-	27	
	5L 689 12 . 030	15°	3/4"	8.6	44.55	63	99.61	-	-	108,5	-	-	27	
45°	5L 688 76 . 045	35°	3/8"	3	5.66	8	12.65	42	-	-	-	19	-	-
	5L 688 84 . 045	30°	3/8"	3.8	8.84	12.5	19.76	49,5	-	-	-	19	-	-
	5L 688 92 . 045	29°	3/8"	4.8	14.14	20	31.62	58,5	-	-	-	22	-	-
	5L 688 92 . 045	29°	3/8"	4.8	14.14	20	31.62	54	-	-	-	22	-	-
	5L 689 00 . 045	35°	3/8" - 1/2" - 3/4"	6	22.27	31.5	49.81	65	-	73,5	24	-	-	27
	5L 689 04 . 045	21°	3/8"	6.9	28.28	40	63.25	66,5	-	-	-	24	-	-
	5L 689 08 . 045	18°	3/4"	7.6	35.36	50	79.06	-	-	73,5	-	-	-	27
	5L 689 12 . 045	18°	3/8"	8.6	44.55	63	99.61	78,5	-	-	-	24	-	-