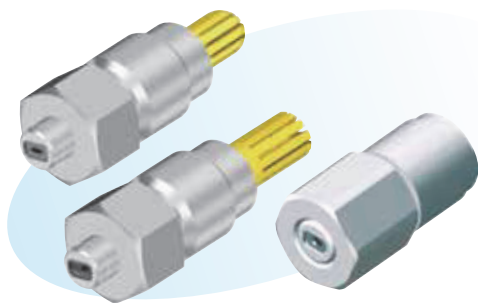


Descaling Nozzle



► Features

- Uniform impact force distribution.
- Excellent wear resistance.
- Consistent performance.

► Application

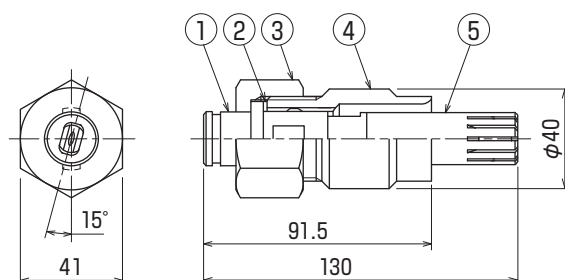
- Descaling

► Materials

- Nozzle tip: Tungsten carbide and 303 Stainless steel
- Cap : 303 Stainless steel
- Adapter : 304 Stainless steel
- Packing : Copper
- Filter : Brass (DNX, DNXR, DNH, DNR)
303 Stainless steel (DNK, DNM)
303 SS and Brass (DNEX, DNEXR)

Shapes and dimensions

● DNEX, High-erosion type

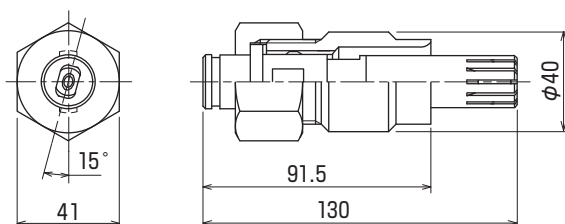


► Features

- Maximum working pressure : 25 MPa
- The erosion amount is three times more, compared with conventional DNH model.

No.	Part name	Model	Weight [g]
1	Nozzle tip	DNEX	679
2	Packing		
3	Cap		
4	Adapter		
5	Filter		

● DNEXR, High-erosion and High-durability type

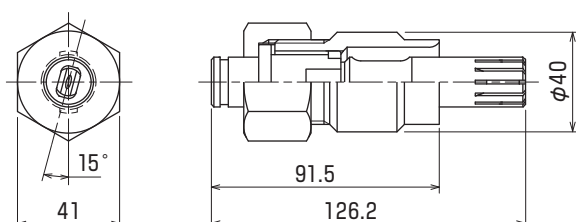


► Features

- Maximum working pressure : 30 MPa
- The erosion amount is three times more, compared with conventional DNH model.
- Nozzle tip material of high durability.

Model	Weight [g]
DNEXR	679

● DNX, Standard type

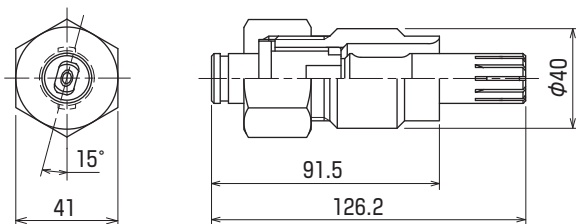


► Features

- Maximum working pressure : 25 MPa
- The erosion amount is two times more, compared with conventional DNH model.

Model	Weight [g]
DNX	644

● DNXR, High-durability type

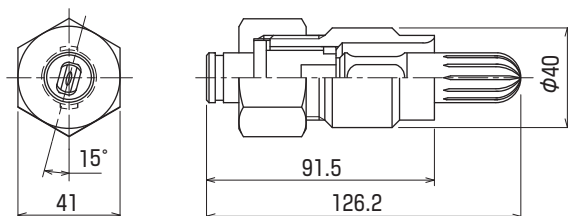


► Features

- Maximum working pressure : 30 MPa
- The erosion amount is two times more, compared with conventional DNH model.
- Nozzle tip material of high durability.

Model	Weight [g]
DNXR	644

● DNH, Standard type

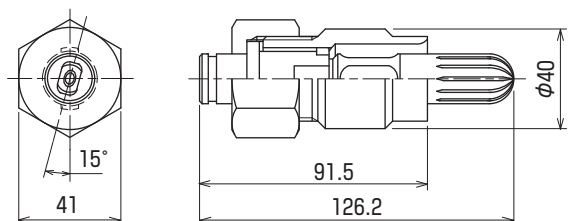


► Features

- Maximum working pressure : 25 MPa
- Conventional model to produce higher impact force.

Model	Weight [g]
DNH	644

● DNR, High-durability type

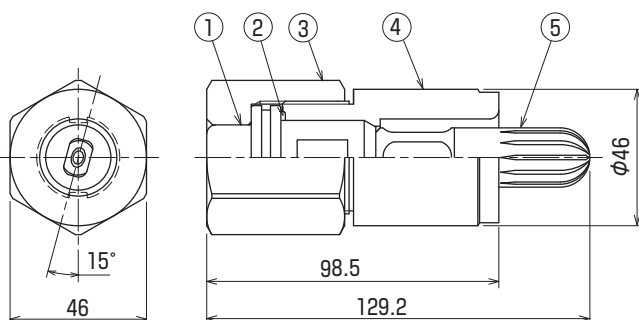


► Features

- Maximum working pressure : 30 MPa
- Nozzle tip material of high durability.

Model	Weight [g]
DNR	644

● DNK, High-pressure type

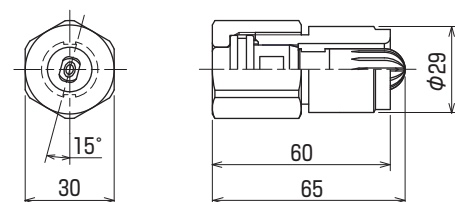


► Features

- Maximum working pressure : 50 MPa
- Nozzle tip material of high durability.

No.	Part name	Model	Weight [g]
1	Nozzle tip	DNK	1173
2	Packing		
3	Cap		
4	Adapter		
5	Filter		

● DNM, Compact type



► Features

- Maximum working pressure : 50 MPa
- Nozzle tip material of high durability.
- Compact design.

Model	Weight [g]
DNM	271

Part name	Weight [g] at following model							
	DNEX	DNEXR	DNX	DNXR	DNH	DNR	DNK	DNM
Nozzle tip	100	100	115	115	115	115	180	45
Packing	4	4	4	4	4	4	5	1
Cap	150	150	150	150	150	150	345	80
Adapter	255	255	255	255	255	255	530	120
Filter	170	170	120	120	120	120	113	25

● Standard type model number list

●: Model availability

Model					Model number	Minimum orifice diameter [mm]	Flow rate [L/min] at following pressure [MPa]								Spray angle at following pressure [MPa]	
DNEX	DNX	DNH DNR	DNK	DNM			1	10	15	20	25	30	40	50	15	50
		●	●	●	0325	1.5	5.7	18.0	22.0	25.5	28.5	31.2	36.0	40.2	27°	28°
		●	●	●	0332	1.4	5.7	18.0	22.0	25.5	28.5	31.2	36.0	40.2	35°	36°
		●	●	●	0340	1.3	5.7	18.0	22.0	25.5	28.5	31.2	36.0	40.2	43°	44°
●	●	●	●	●	0425	1.7	7.6	24.0	29.4	33.9	37.9	41.6	48.0	53.7	27°	28°
●	●	●	●	●	0432	1.6	7.6	24.0	29.4	33.9	37.9	41.6	48.0	53.7	35°	36°
●	●	●	●	●	0440	1.5	7.6	24.0	29.4	33.9	37.9	41.6	60.0	53.7	43°	44°
●	●	●	●	●	0525	1.9	9.5	30.0	36.8	42.4	47.4	52.0	60.0	67.1	27°	28°
●	●	●	●	●	0532	1.8	9.5	30.0	36.8	42.4	47.4	52.0	60.0	67.1	35°	36°
●	●	●	●	●	0540	1.7	9.5	30.0	36.8	42.4	47.4	52.0	72.0	67.1	43°	44°
●	●	●	●	●	0625	2.1	11.4	36.0	44.1	50.9	56.9	62.4	72.0	80.5	27°	28°
●	●	●	●	●	0632	2.0	11.4	36.0	44.1	50.9	56.9	62.4	72.0	80.5	35°	36°
●	●	●	●	●	0640	1.9	11.4	36.0	44.1	50.9	56.9	62.4	84.0	80.5	43°	44°
●	●	●	●	●	0725	2.3	13.3	42.0	51.4	59.4	66.4	72.7	84.0	93.9	27°	28°
●	●	●	●	●	0732	2.2	13.3	42.0	51.4	59.4	66.4	72.7	84.0	93.9	35°	36°
●	●	●	●	●	0740	2.1	13.3	42.0	51.4	59.4	66.4	72.7	90.6	93.9	43°	44°
●	●	●	●	●	0825	2.5	14.3	45.3	55.5	64.1	71.6	78.5	90.6	101	27°	28°
●	●	●	●	●	0832	2.3	14.3	45.3	55.5	64.1	71.6	78.5	90.6	101	35°	36°
●	●	●	●	●	0840	2.2	14.3	45.3	55.5	64.1	71.6	78.5	108	101	43°	44°
●	●	●	●	●	0925	2.6	17.1	54.0	66.1	76.4	85.4	93.5	108	121	27°	28°
●	●	●	●	●	0932	2.5	17.1	54.0	66.1	76.4	85.4	93.5	108	121	35°	36°
●	●	●	●	●	0940	2.4	17.1	54.0	66.1	76.4	85.4	93.5	108	121	43°	44°
●	●	●	●	●	1125	3.1	21.4	67.7	82.9	95.7	107	117	135	151	27°	28°
●	●	●	●	●	1132	2.8	21.4	67.7	82.9	95.7	107	117	135	151	35°	36°
●	●	●	●	●	1140	2.7	21.4	67.7	82.9	95.7	107	117	135	151	43°	44°
●	●	●	●	●	1325	3.2	24.5	77.5	94.9	110	123	134	155	173	27°	28°
●	●	●	●	●	1332	3.1	24.5	77.5	94.9	110	123	134	155	173	35°	36°
●	●	●	●	●	1340	2.9	24.5	77.5	94.9	110	123	134	155	173	43°	44°
●	●	●	●	●	1525	3.5	28.6	90.5	111	128	143	157	181	202	27°	28°
●	●	●	●	●	1532	3.3	28.6	90.5	111	128	143	157	181	202	35°	36°
●	●	●	●	●	1540	3.2	28.6	90.5	111	128	143	157	181	202	43°	44°
●	●	●	●	●	1825	3.8	34.2	108	132	153	171	187	216	241	27°	28°
●	●	●	●	●	1832	3.6	34.2	108	132	153	171	187	216	241	35°	36°
●	●	●	●	●	1840	3.4	34.2	108	132	153	171	187	216	241	43°	44°
●	●	●	●	●	1925	3.9	35.7	113	138	160	179	196	226	253	27°	28°
●	●	●	●	●	1932	3.7	35.7	113	138	160	179	196	226	253	35°	36°
●	●	●	●	●	1940	3.6	35.7	113	138	160	179	196	226	253	43°	44°
●	●	●	●	●	2325	4.3	43.0	136	167	192	215	236	272	304	27°	28°
●	●	●	●	●	2332	4.1	43.0	136	167	192	215	236	272	304	35°	36°
●	●	●	●	●	2340	3.9	43.0	136	167	192	215	236	272	304	43°	44°

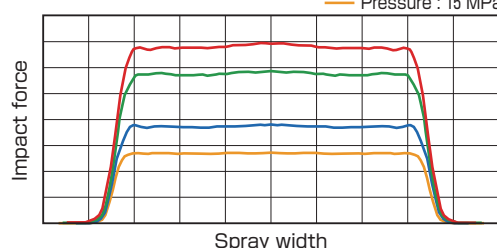
● Model and Model Number representing

DNH 1 5 2 5 L
 | | |
 Model Model number Deviating direction of orifice
 R or no symbol - 15° clockwise deviation
 L - 15° counterclockwise deviation
 F - No deviation

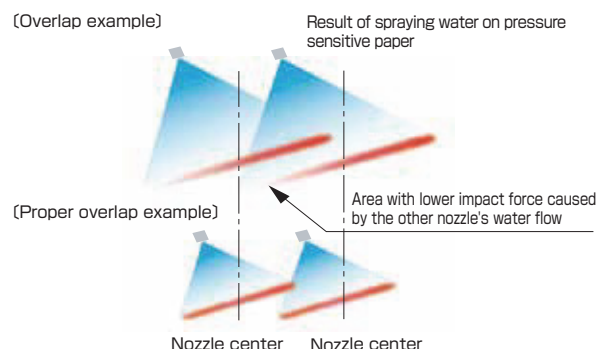
■ Performance data

Widthwise impact force distribution

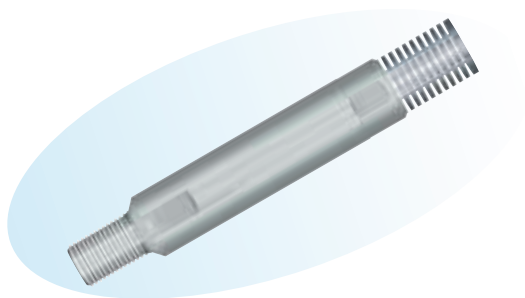
Nozzle model number DNK 1325
 Spray distance 300 mm
 — Pressure : 35 MPa
 — Pressure : 30 MPa
 — Pressure : 20 MPa
 — Pressure : 15 MPa



Example of overlap spray pattern



Descaling Nozzle Check Valve



Features

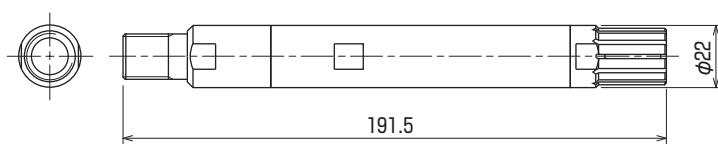
- Compact design.
- High impact force.
- High durability.
- Less maintenance cost.

Material

- Stainless steel and Stellite

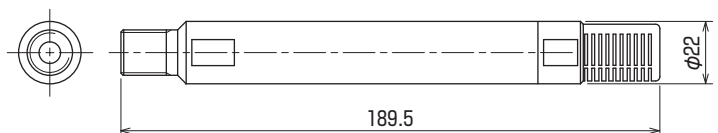
Shapes and dimensions

● For DNEX and DNEXR



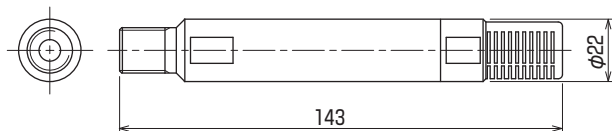
Model	Operating pressure [MPa]	Weight [g]
DNEX, DNEXR	0.6	290

● For DNX and DNXR



Model	Operating pressure [MPa]	Weight [g]
DNX, DNXR	0.6	330

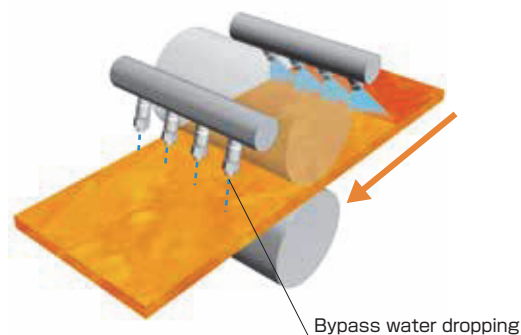
● For DNH and DNR



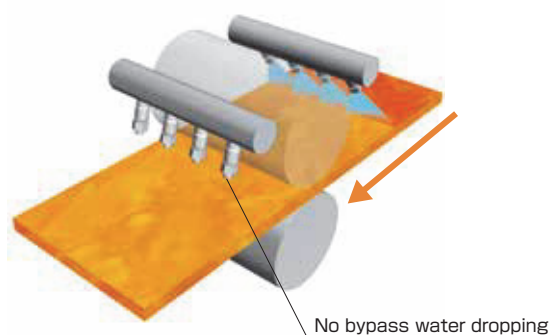
Model	Operating pressure [MPa]	Weight [g]
DNH, DNR	1.0	250

Benefits of use

Nozzle without Check Valve

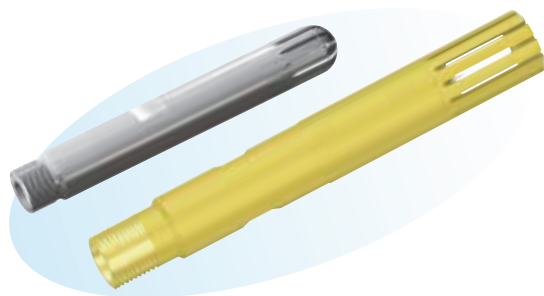


Nozzle with Check Valve



- Prevents water hammering.
- Prevents a temperature drop of the steel plate due to bypass water.
- Reduces the idling time and enhances the productivity.

Descaling Nozzle Long Filter



► Features

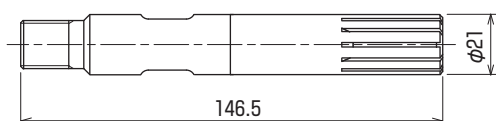
- High impact force.

► Material

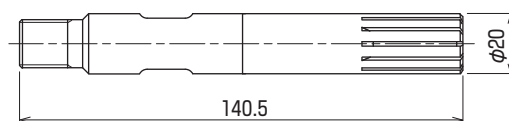
- DNEX, DNEXR : Stainless steel and Brass
- DNX, DNXR : Brass
- DNH, DNR : Brass
- DNK, DNM : Stainless steel

Shapes and dimensions

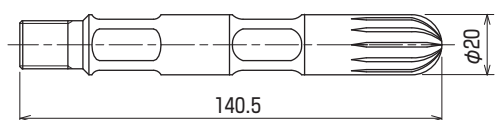
- For DNEX and DNEXR



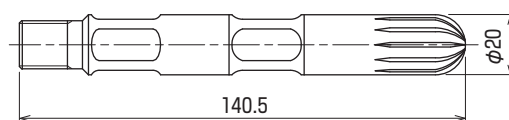
- For DNX and DNXR



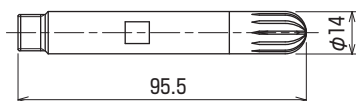
- For DNH and DNR



- For DNK



- For DNM

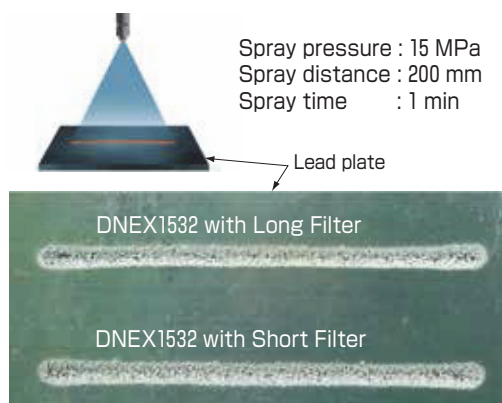


Material	Weight [g]
DNEX, DNEXR	215
DNX, DNXR	215
DNH, DNR	215
DNK	205
DNM	75

■ Benefits of use

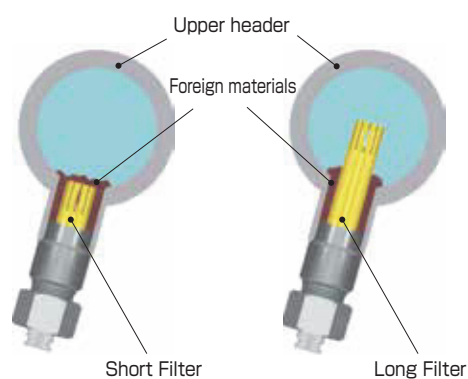
- Impact force 1.2 times that of common filters.
- Prevention of clogging of nozzle.

Lead plate erosion test



The Long Filter creates a thinner spray pattern resulting in deeper surface penetration compared with the Short Filter.

Preventive measures against filter clogging



Putting filter slits on the upper side of the header prevents filter from clogging as foreign material gathers on the lower side.