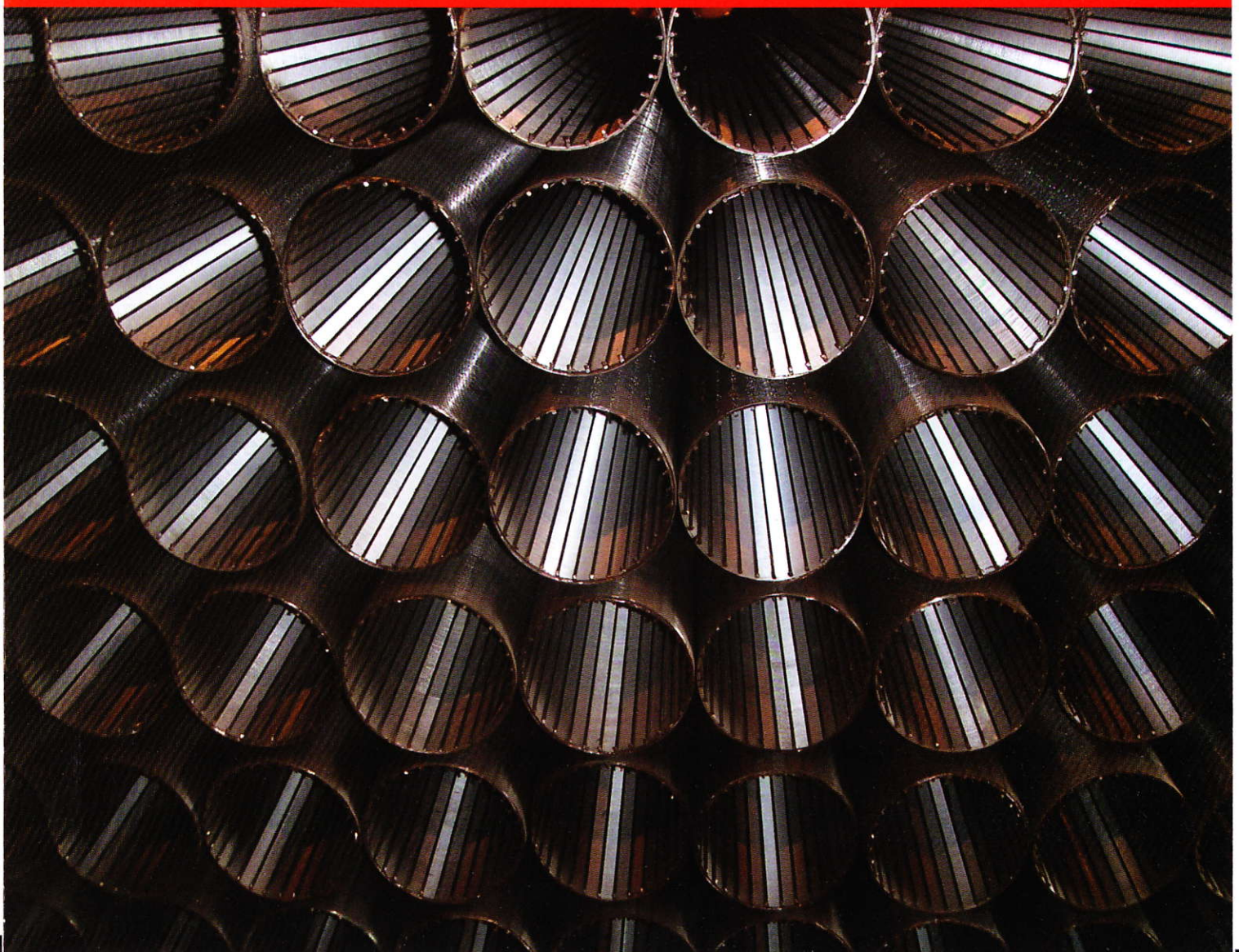
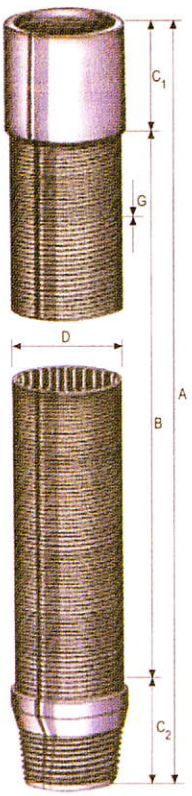
PIPAMAS

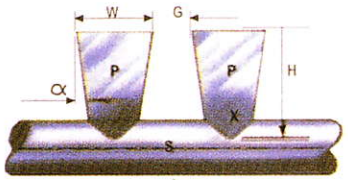
Quality and Productivity, the prevailing motto of PIPAMAS

Water Well Screen



Water Well Screen





DESCRIPTION:

A - Overall Joint Length (OAL)
B - Effective Screen Length (ESL)
C_1 - Box Connector
C_2 - Pin Connector
D - I/D of Screen
G - Gauge, Aperture or Slot Opening
P - Profile Wire
S - Support Rod
W - Profile Wire Head Width
H - Profile Wire Depth
α: - Profile Wire Relief Angle
X - Fused Part of Wire and Support Rod

PIPAMAS waterwell screens are custom-built to suit each application for the type of material required and type of end connector fitting and to strictly conform to AWWA and other standards.

Screen ranges are produces in 1" to 30" O/D in lengths to suit your requirements up to 30'. Slot openings as fine as 0.001" up to 0.25" can be manufactured in increments of 0.001" The safest installation is SS304, which is stronger than a carbon steel screen, and will resist corrosion to last much longer.

To determine the corrosive nature of the well, it is important that the acidity (pH value) of the water from the reservoir be measured. By taking a water sample from the drilled well we can analyze it in our laboratory to determine the pH value. This allows us to fabricate screens to your individual well characteristics to maximize production.

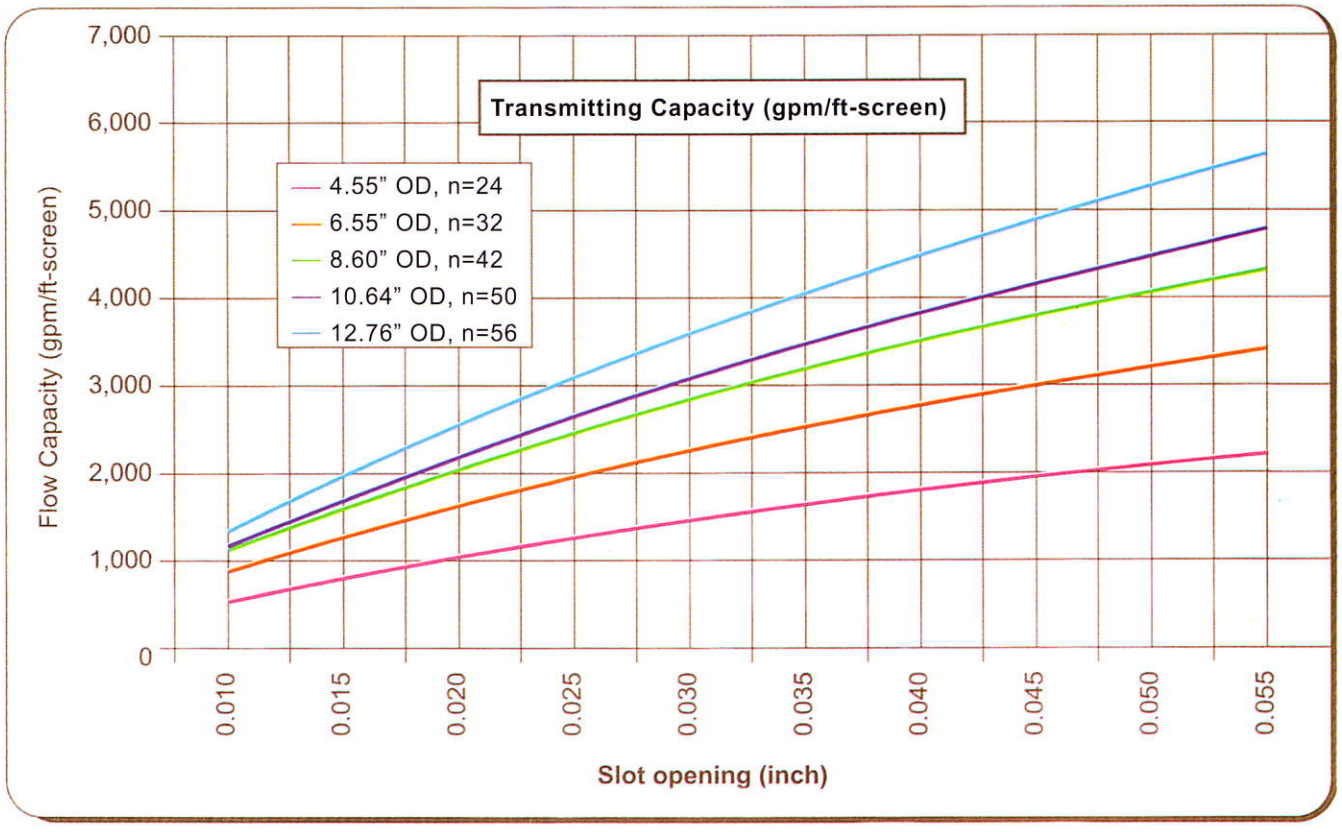
Having determined the malarial and the required collapse strength, tensile and column strength calculations, manufacturing can commence.

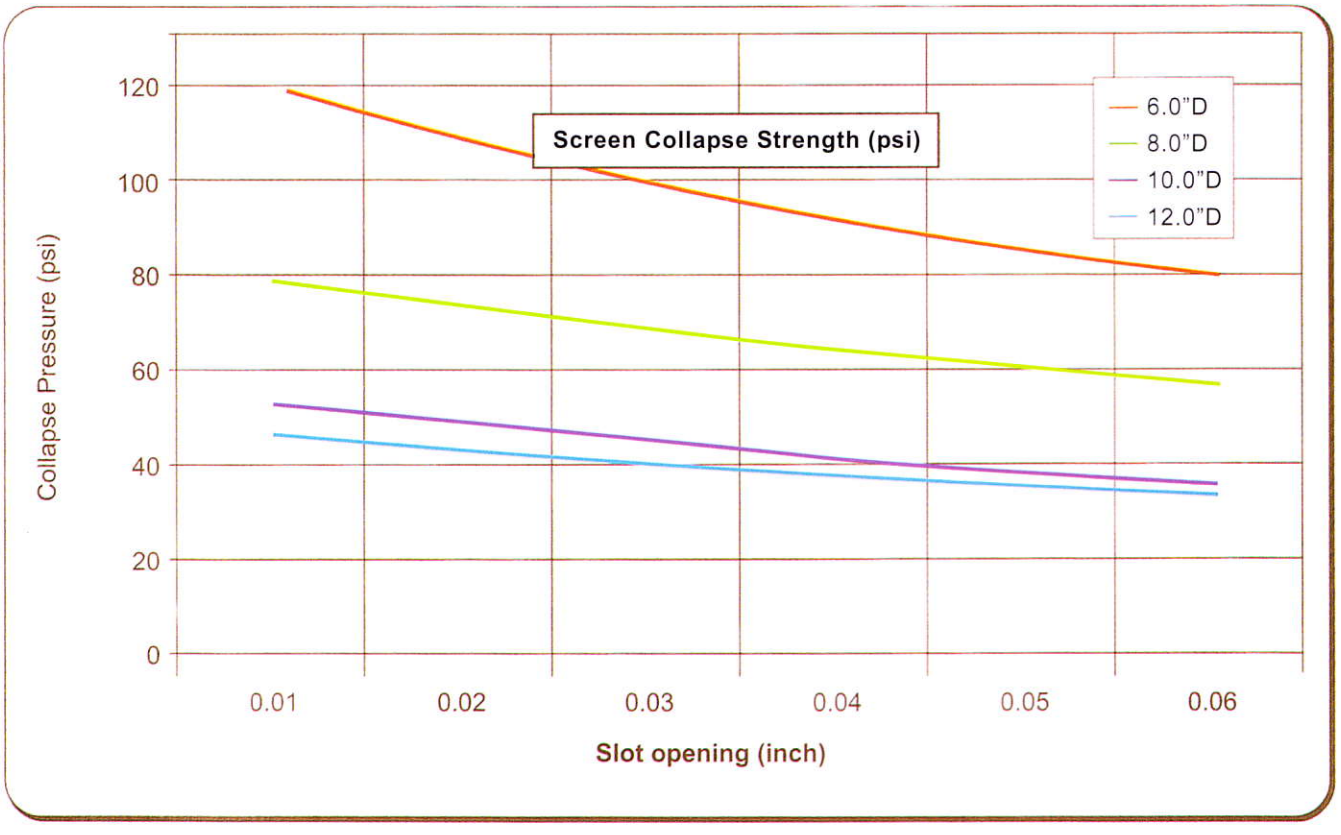
Standard Stainless Steel Well Screen										
Screen			Profile Wire			Support Rod		Approx. Shipping Wt		
Norminal Dia.	ID"	OD"	Wire No	W"	H"	Dia "	Nos' (pcs)	0.02" slot	0.03" slot	0.04" slot
1.80	1.90	2.32	No.60	0.060	0.100	0.125	12	9.1	8.4	7.8
2.00	2.10	2.52	No.60	0.060	0.100	0.125	14	10.9	10.1	9.5
2.70	2.80	3.25	No.90	0.090	0.120	0.125	16	14.8	13.9	13.2
3.00	3.10	3.55	No.90	0.090	0.120	0.125	18	16.2	15.3	14.5
4.00	4.10	4.55	No.90	0.090	0.120	0.125	24	20.4	19.2	18.2
6.00	6.10	6.55	No.90	0.090	0.120	0.125	32	28.9	27.2	25.7
8.00	8.10	8.60	No.90	0.090	0.120	0.150	42	41.9	39.6	37.7
10.00	10.10	10.64	No.90	0.090	0.140	0.150	50	53.2	50.2	47.7
12.00	12.10	12.76	No.110	0.110	0.180	0.175	56	90.7	86.1	82.0

Collapse Strength (psi)											Support Rod		Tensile Load
Slot Size	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1	Dia "	Nos' (pcs)	Ys (lb)
1.8"D	1,464	1,281	1,439	1,025	932	854	769	732	683	641	0.125	12	1,546
2.0"D	1,116	977	868	781	710	651	601	558	521	488	0.125	14	1,804
2.7'D	1,088	989	906	837	777	725	680	640	604	572	0.125	16	2,062
3.0"D	819	745	683	630	585	546	512	482	455	431	0.125	18	2,319
4.0"D	372	338	310	286	266	248	233	219	207	196	0.125	24	3,093
6.0"D	119	108	99	92	85	79	74	70	66	63	0.125	32	4,123
8.0"D	52	47	43	40	37	35	32	30	29	27	0.150	42	7,793
10.0"D	79	72	67	63	59	55	52	50	47	45	0.150	50	9,278
12.0"D	46	42	39	36	34	32	30	29	27	26	0.175	56	14,143

Note:

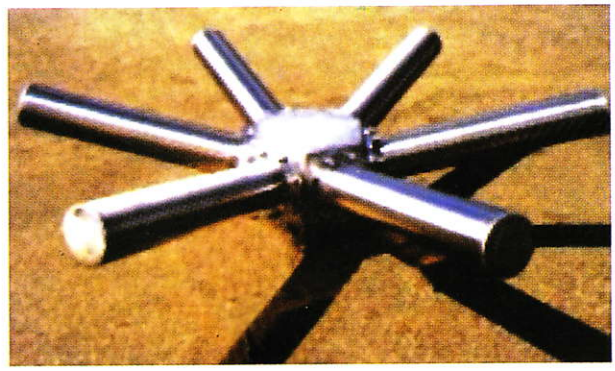
1. *Material: 304SS or 316SS or low carbon steel*
2. *Standard Length is 3 meters per joint*
3. *Standard end fitting, 1.25"H x Nominal Dia.*
4. *Pin or Box end fittings are available upon request. Please contact Pipamas Sales for more information*
5. *We are provided custom design and fabrication of well screen of any sizes and end fittings.*
6. *For larger diameter screen and other slot opening, please contact Pipamas for detail.*


Transmitting Capacity (gpm/ft-screen)
4.55" OD, n=24
6.55" OD, n=32
8.60" OD, n=42
10.64" OD, n=50
12.76" OD, n=56
Flow Capacity (gpm/ft-screen)
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
0.010
0.015
0.020
0.025
0.030
0.035
0.040
0.045
0.050
0.055
Slot opening (inch)


Screen Collapse Strength (psi)
6.0"D
8.0"D
10.0"D
12.0"D
Collapse Pressure (psi)
120
100
80
60
40
20
0
0.01
0.02
0.03
0.04
0.05
0.06
Slot opening (inch)

Laterals & Distributors

PIPAMAS lateral systems are precision engineered to maximize bed utilization and provide uniform collection and distribution patterns. PIPAMAS offers engineering assistance in the design and development of new systems as well as improving and replacing existing installations.

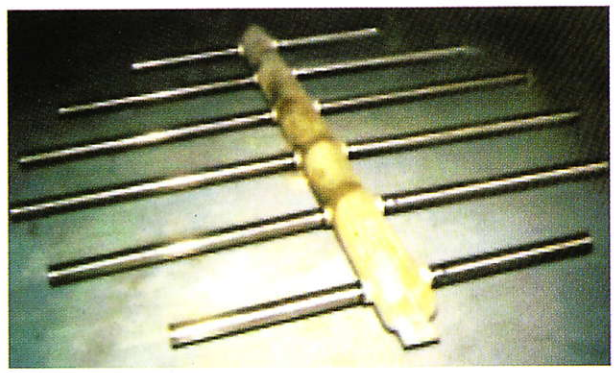


HUB LATERALS

This design is commonly used in sand filtration, activated carbon columns, and demineralizer vessels. Laterals are often designed in a multi-tier pattern as well as angled to conform to the vessel head configuration.

HEADER-LATERALS

Header-lateral systems are designed as collectors and distributors in larger vessels. These are optimum systems where mid-bed or regenerant processes are employed. Units are custom designed for either side or center vessel configuration and can accommodate threaded, nozzle or pad connections.



CUSTOM DESIGNED LATERALS

PIPAMAS laterals are custom designed as replacements for existing installations. Exact replacement is accommodated as well as re-engineered to improve process fluid dynamics.

HEADER & LATERALS ARE USED FOR

- filtering either liquids or gases
- obtaining excellent distribution or collection of the flow
- retaining any reaction / filter media such as sand, catalyst, resin, activated carbon
- achieving highly efficient and uniform sprigging

HEADER & LATERALS OFFER MANY ADVANTAGES

- High percentage of open area for a uniform distribution and a negligible pressure drop
- 'V' shape profile wires assure a constant open area by regeneration as it is non-clogging
- maintenance free with efficient backwash
- unique customized fixtures to reduce costs

ADVANTAGES OF USING PIPAMAS WEDGE WIRE LATERALS

The wedge wire screens fabricating technique ensure that the slot opening remains accurate. The wire is wound over support rods and fuse welded at each intersection; the slot opening thus manufactured remains constant even under high pressure & temperature conditions (whereas woven wire filter elements openings increase or decrease). The open area provided by Laterals is far more superior to any other existing system (very effective for intermediate collection or distribution in mixed-bed processes).
The resulting low slot entrance velocity ensures that the pressure drop across the screen is negligible. Thus the overall vessel head loss is minimized. As a result, process time and energy consumption are decreased. With sharp edges and a very smooth surface, 'V' shape profile wires ensure a two point contact with the solid particles. Particles do not get trapped in the slot opening. As a result, clogging and binding effects on the screen are negligible, the open area remains constant and the laterals do not need to be replaced.

Nozzle

PIPAMAS screen nozzles have distinct advantages in that they are economical, non-clogging and ideally suited as collectors and distributors.

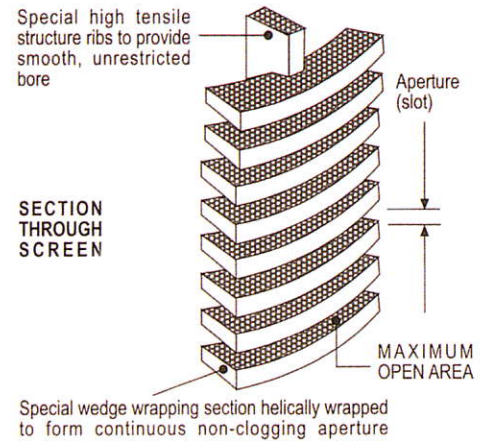
Commonly made of stainless steel, PIPAMAS nozzles are also available in a variety of other alloys, all providing a high percentage of open area white maintaining exceptional strength and efficiency. The most common standard nozzle is style "N" as shown. Efficient and easily installed in false bottom installations with lateral systems. Custom design connections are equality available.

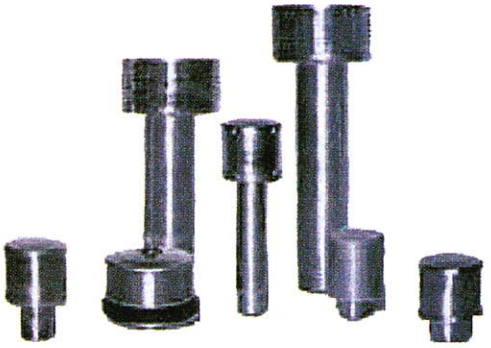
Nozzles are used for :

- Filtering either liquids or gases
- Retaining any reaction / filter media such as sand, catalyst, resin activated carbon, etc.....
- Optimizing the distribution or collection of the flow.

Nozzles Features Benefits

- a fully welded & strong structure
- a high resistance to corrosion
- a non clogging surface





STANDARD NOZZLE SPECIFICATIONS					
TYPE		75N	100N	75R	100R
FITTING	SIZE	3/4" NPT	1" NPT	3/4" (19mm)	1" (25mm)
	TYPE	Thread	Thread	Ring	Ring
SCREEN DIAMETER		2" (50mm)			
SCREEN LENGTH		1 9/16" (40mm)			
OVERALL LENGTH		3 1/8" (80mm)		2 1/8" (54mm)	
SPACING	OPTIMUM	6" (150mm)			
	MAXIMUM	11" (300mm)			
SUGGESTED MAXIMUM COLLECTION FLOW PER NOZZLE		4 GPM (15 LPM)			
SUGGESTED MAXIMUM BACKWASH FLOW PER NOZZLE		6 1/2 GPM (25 LPM)	11 1/2 GPM (44 LPM)	6 GPM (23 LPM)	10 1/2 GPM (40 LPM)
COLLAPSE PRESSURE		300 PSI (2070 kPa			
BURST PRESSURE		200 PSI (1380 kPa			

Wire #	A	B	C	O.A	D
N20-75	1 11/16"	3/4" NT	.007"	.98 sq. in.	2.00"
N30-75	1 11/16"	3/4" NPT	.007"	1.57 sq. in.	3.00"
N20-10	1 11/16"	1.0" NPT	.007"	.98 sq. in.	2.00"
N30-10	1 11/16"	1.0" NPT	.007"	1.57 sq. in.	3.00"
Note: .012" Slot increases O.A. 59 %					

FOR MORE INFORMATION PLEASE CONTACT :

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