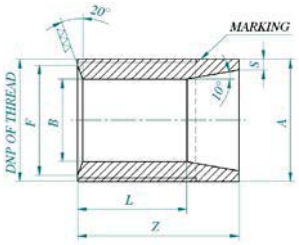
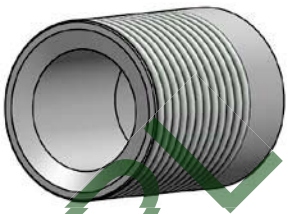
Screwed Nozzles STD-TB-HPU-5002 SH. 6 OF 29

DNP	A	B	F	L	Z	S	S	S	S	Mass
		+0,5 -o				STD	XS	160	XXS	Kg.
1/4"	13.7	6.0	10.5	40	100	-	-	-	-	0.1
1/2"	21.3	11.3	18.0	40	100	2.77	3.73	4.75	7.45	0.2
3/4"	26.7	14.7	22.0	40	100	2.87	3.91	5.54	7.82	0.2
1"	33.4	19.2	29.5	55	100	3.38	4.55	6.35	9.09	0.4
1.1/2"	48.6	30.5	43.5	55	100	3.68	5.08	7.14	10.20	0.7
2"	60.3	39.3	53.0	70	100	3.91	5.54	8.71	11.10	1.2
3"	88.9	58.4	79.0	90	150	5.49	7.62	11.10	15.20	3.6
4"	114.3	77.2	103.0	110	150	6.02	8.56	13.50	17.10	5.7
6"	168.3	116.4	152.0	135	150	7.11	11.00	18.20	21.90	11.8
8"	219.1	153.1	196.0	160	180	8.18	12.70	23.00	22.20	23.5
10"	273.0	190.4	241.0	170	200	9.27	12.70	28.60	-	47.3

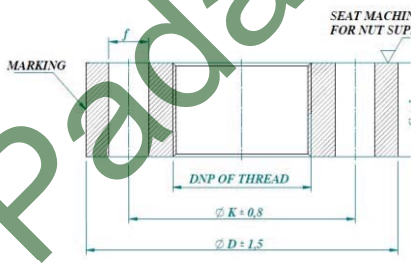


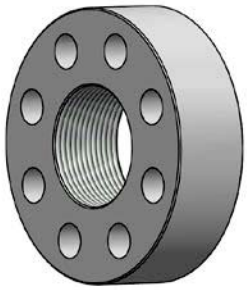


Notes:
1) Dimensions: ANSI B 36.19 and as shown in table.
2) Construction: from seamless pipe or forged.
3) Thread: ANSI B 1.20.1 NPSM.
4) Tolerances: ASTM a 530; ANSI B 1.20.1 (on thread).
5) Materials e tests: per spc. G510 and as specified in p.o.
6) Design conditions: 292 bars at 80°C; 258 bars at 160°C; 221 bars at 250°C.
7) "S" thickness must be shown as specified each time.
8) Bevel B16.25

Screwed Flanges STD-TB-HPU-5002 SH. 10 OF 29

DNP	D	ID		C	K	f	N° of holes	Stud bolts		Mass
								DN"	Lenght	Kg
1/4"	80	11.8	1/4" NPSM	20	50	15.9	3	1/2"	85	0.4
1/2"	95	18.94	1/2" NPSM	20	60	15.9	3	1/2"	90	0.4
3/4"	100	24.34	3/4" NPSM	25	64	15.9	4	1/2"	100	1.5
1"	105	30.54	1" NPSM	30	68	19.1	4	5/8"	120	2.1
1.1/2"	135	45.74	1.1/2" NPSM	35	95	22.2	4	3/4"	130	3.9
2"	155	57.44	2" NPSM	45	110	25.4	4	7/8"	160	6.3
3"	200	84.77	3" NPSM	60	145	25.4	8	7/8"	190	12.7
4"	250	110.17	4" NPSM	75	185	31.8	8	1.1/8"	235	23.7
6"	330	167.17	6" NPSM	100	255	41.3	8	1.1/2"	325	53.4
8"	410	214.97	8" NPSM	120	320	50.8	8	1.7/8"	370	96.7
10"	480	268.87	10" NPSM	140	380	55.0	8	2"	430	114.0
12"	575	318.9	12" NPSM	186	485	48	16	1.3/4"	500	224.0

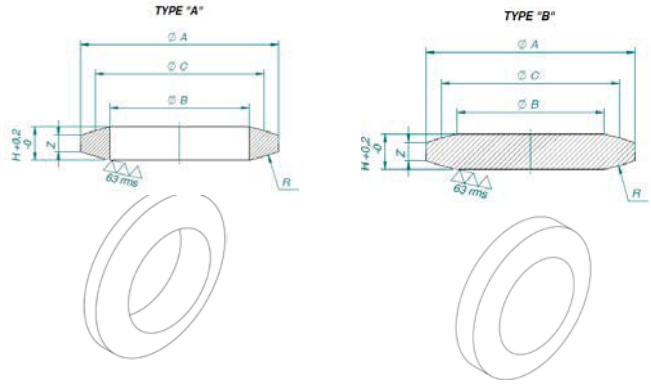


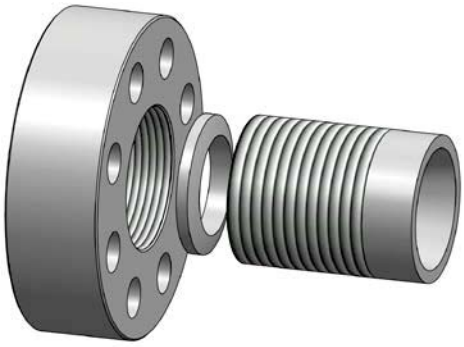


Notes:
1) Thread: ANSI B 1.20.1 NPSM.
2) Tolerances: ANSI B 16.5; ANSI B 1.20.1 (on thread).
3) Materials e tests: ASTM A 105
4) Design conditions: 292 bars at 80°C; 268 bars at 160°C; 221 bars at 250°C.
5) Stud. bolts per ENI Std. 0368.00.

Snam TB.5002 STD-TB-HPU-5002 SH. 13 OF 29 / Urea Casale DWG 8577-00-E-SDP- 012

DNP	B	A	C	R	H	Z	Mass Kg.	
	+0,5 -o		Contact diameter	Spherical radius		Distance when joint tightened	Type A	Type B
1/4"	6,0	15	8,7	12,7	9	7	0,010	0,013
1/2"	11,3	21	15,0	22,0	9	8	0,020	0,027
3/4"	14,7	27	20,5	30,0	10	7	0,025	0,040
1"	19,2	32	25,0	36,5	10	7	0,040	0,060
1.1/2"	30,5	48	38,0	55,5	11	7	0,090	0,160
2"	39,3	56	46,5	68,0	11	6	0,100	0,200
3"	58,4	83	69,8	102,0	14	7	0,300	0,600
4"	77,2	108	91,0	133,0	18	9	0,600	1,300
6"	116,4	160	136,1	199,0	25	13	1,900	3,900
8"	153,1	212	175,8	257,0	30	16	3,500	8,000
10"	190,0	265	212,0	310,0	38	20	5,500	10,500





Notes:
1) DNP= nominal pipe size in Inches.
2) Dimension in mm.
3) Construction: forged.
4) Materials e tests: per spc. G510 and as specified on P.O.
5) Design conditions: 292 bars at 80°C; 268 bars at 160°C; 221 bars at 250°C.
6) Each piece must be marked by its marking.
7) "Z" dimension is informative for assembly drawing only.
8) Seal surface to have a max hardness of 160 brinell.