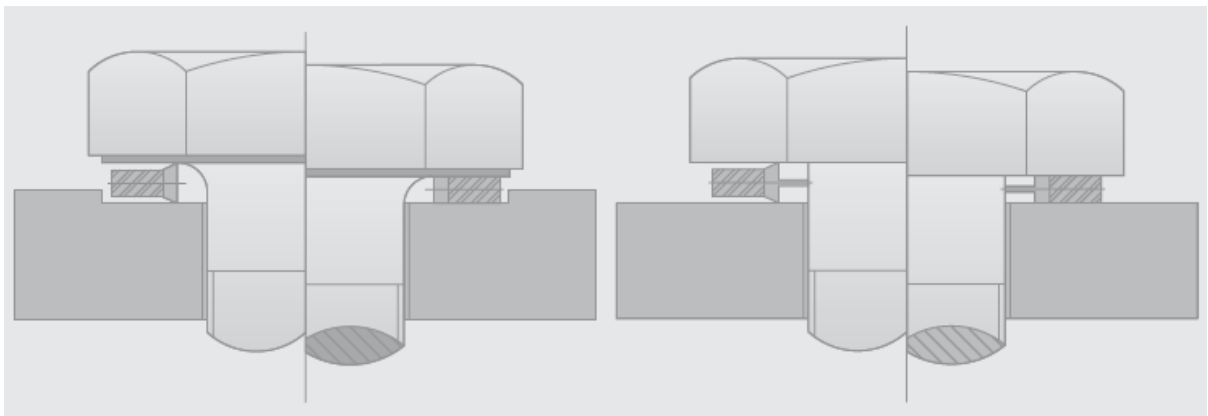
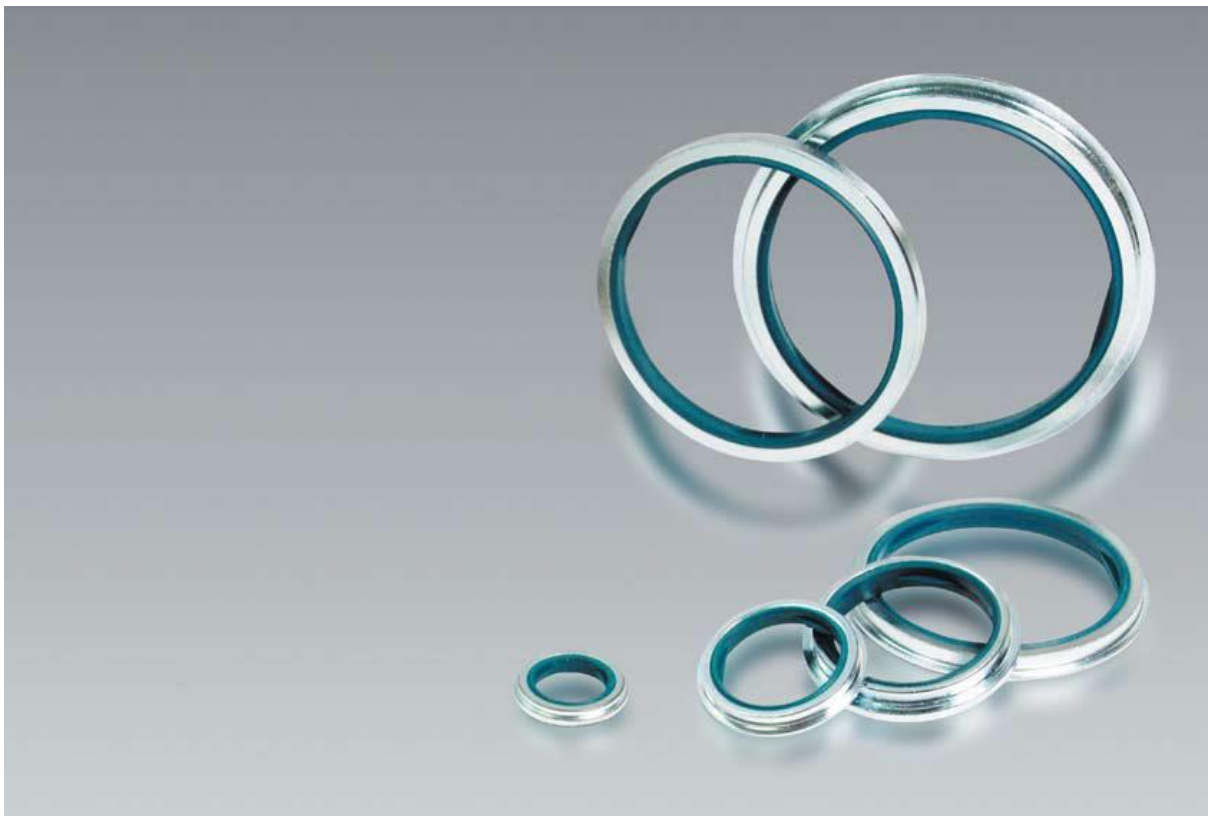




Product Information

NAK BONDED SEAL



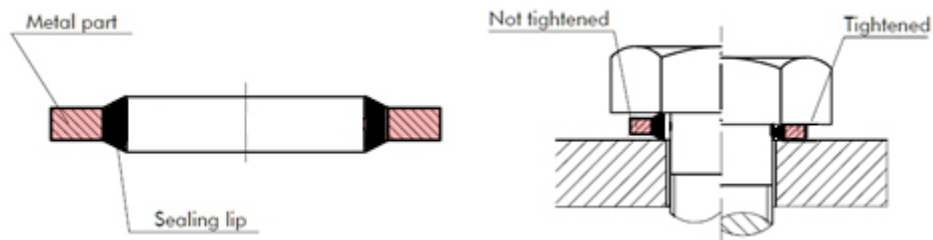


Type WS/WS1

The NAK Bonded Seal comprises a metal washer and an elastomeric ring bonded inside the diameter. The metal washer prevents over-compression and limits deformation of the elastomeric ring; the elastomer prevents lubricant leakage internally and avoids water or the pollutant invasion from outside environment.

The NAK Bonded seal was originally designed to withstand high pressures, and it is being substituted for copper type washers in higher pressure systems.

WS PROFILE



Key Benefits

- Reliable High & low pressure sealing
- Wide temperature capability
- Metal ring prevents over-compression and extrusion

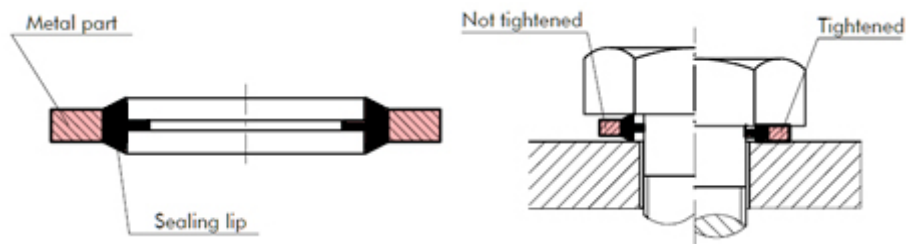
Temperature range on the NBR compound -40°C to 107°C



We also offer a standard WS1 (the self-centering types) with complete thread sizes.

NAK SCWS bonded seal is developed to eliminate the occurrence of leakage due to seal offset, this self-centring type of bonded seal has the additional benefit of pre-assembling to threads with the consequence production line saving. The thin seal membrane offers little resistance during assembly.

WS1 PROFILE

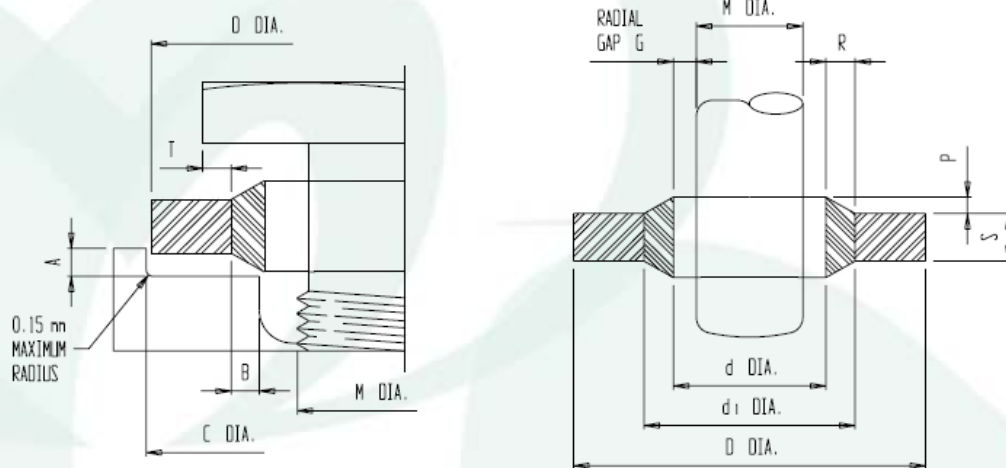


Key Benefits

- All key benefits from the original bonded seal
- Concentrically located
- Positively retained
- Ease of assembly
- Ability to pre-assemble
- Optimised component stocking

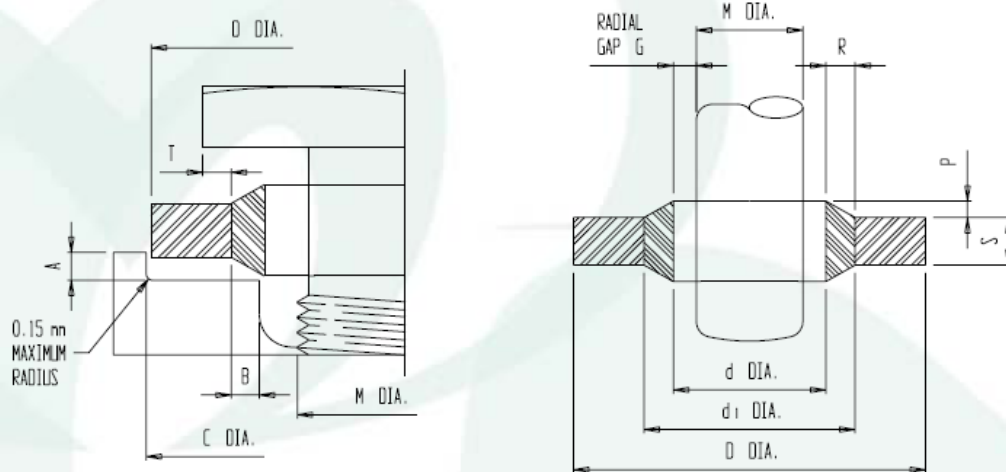
Temperature range on the NBR compound -40°C to 107°C

NAK BONDED SEAL



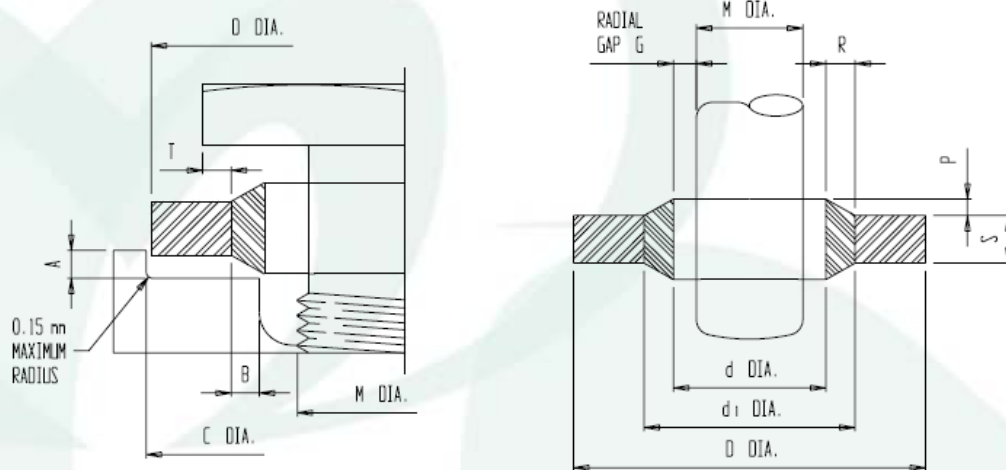
TREAD DIA 'M'	PART NUMBER	D +0.13 -0.00	'd +/- 0.10	'd1 +/-0.10	S		R +/-0.1	P +0.25	RADIAL GAP G +/-0.05
8	BP212	13	8.7	10	1	0.1	0.65	0.3	0.35
10	BP217	16	10.7	12.4	1.5	0.1	0.85	0.4	0.35
12	BP222	18	12.7	14.4	1.5	0.1	0.85	0.4	0.35
14	BP227	22	14.7	16.4	1.5	0.1	0.85	0.4	0.35
16	BP229	24	16.7	18.4	1.5	0.1	0.85	0.4	0.35
18	BP232	26	18.7	20.4	1.5	0.1	0.85	0.4	0.35
20	BP233	28	20.7	22.5	1.5	0.1	0.90	0.4	0.35
22	BP236	30	22.7	24.4	2	0.1	0.85	0.4	0.35
24	BP238	32	24.7	26.4	2	0.01	0.85	0.4	0.35
26	BP239	35	26.7	28.4	2	0.01	0.85	0.4	0.35
27	BP240	36	27.2	29	2	0.1	0.90	0.4	0.01
28	BP241	37	28.7	30.4	2	0.1	0.85	0.4	0.35
30	BP242	39	31	33	2	0.01	1.00	0.4	0.5
33	BP243	42	33.7	35.8	2	0.01	1.05	0.4	0.35
42	BP247	53	42.7	44.4	3	0.15	0.85	0.4	0.35
48	BP248	59	48.7	50.8	3	0.15	1.05	0.4	0.35

NAK BONDED SEAL



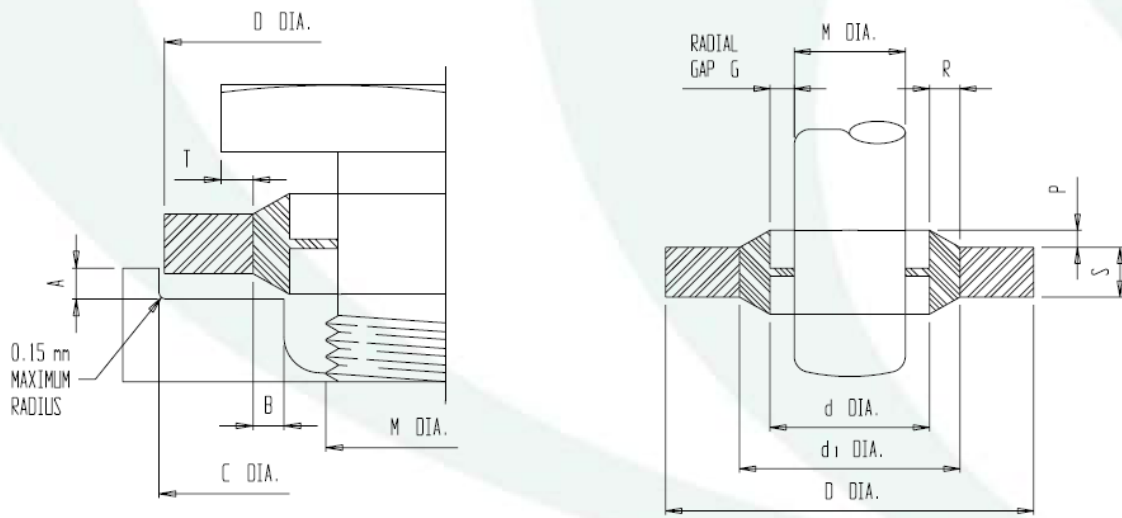
TREAD DIA 'M'	PART NUMBER	D -0.2	'd +0.2	'd1 +0.2	S	R +/-0.2	P +0.25
1/4	BP511	18.7	13.85	15.75	1.25	0.95	0.25
3/8	BP512	22.7	17.35	19.25	1.25	0.95	0.25
1/2	BP513	26.7	21.65	23.55	1.25	0.95	0.25
3/4	BP514	32.5	27.3	29.2	1.25	0.95	0.25
1	BP515	39.5	34.2	36.1	2	0.95	0.25

NAK BONDED SEAL



	THREAD SIZE 'M'	PART NUMBER	D DIA +/-0.13	'd +/- 0.13	'd1 +/- 0.10	S		R +/- 0.13	P	RADIAL GAP G+0.07 INCH B.S.P
INCH	BSP									
3/8	3/8 BSP	BP45A	15.88	10.37	11.84	2.03	+0.15	0.73	0.25/0.51	0.42
1/2	1/4	BP45B	20.57	13.74	15.21	2.03	+0.15	0.73	0.25/0.51	0.52
	3/8	BP45C	23.8	17.28	18.75	2.03	+0.15	0.73	0.25/0.51	0.31
3/16	1/2	BP45D	28.58	21.54	23.01	2.34	+0.26	0.73	0.25/0.51	0.45 0.29
7/8	5/8	BP45E	31.75	23.49	24.97	2.34	+0.26	0.74	0.25/0.51	0.63 0.29
1	3/4	BP45F	34.93	27.05	28.53	2.34	+0.26	0.74	0.25/0.51	0.82 0.30
1 5/16	1	BP45H	42.8	33.89	36.88	3.25	+0.26	1.5	0.25/0.51	0.28 0.40
1 5/8	1 1/4	BP45J	52.38	42.93	45.93	3.25	+0.26	1.5	0.25/0.51	0.82 0.51
1 7/8	1 1/2	BP45K	58.6	48.44	51.39	3.25	+0.26	1.47	0.25/0.51	0.4 0.32
	2	BP45M	73.03	60.58	63.63	3.25	+0.26	1.52	0.25/0.51	0.48

NAK SCWS (SELF-CENTRING) BONDED SEAL



THREAD SIZE 'M'	PART NUMBER	'd +/-0.13	C DIA CENTRALISING LIP		'd1 +/-0.10	D DIA +/-0.13	S +/-0.10
1/8 BSP	BP45A-SC	10.37	8.26	-0/+0.25	11.84	15.88	2
1/4 BSP	BP45B-SC	13.74	11.18	-0/+0.25	15.21	20.57	2
3/8 BSP	BP45C-SC	17.28	14.76	-0/+0.25	18.75	23.8	2
1/2 BSP	BP45D-SC	21.54	18.24	-0/+0.25	23.01	28.58	2.47
5/8 BSP	BP45E-SC	23.49	20.27	-0/+0.25	24.97	31.75	2.47
3/4 BSP	BP45F-SC	27.05	23.83	-0/+0.25	28.53	34.93	2.47
1 BSP	BP45H-SC	33.89	29.92	-0/+0.37	36.88	42.8	3.4
1 1/4 BSP	BP45J-SC	42.93	38.45	-0/+0.37	45.93	52.38	3.4
1 1/2 BSP	BP45K-SC	48.44	44.45	-0/+0.37	51.39	58.6	3.4
2 BSP	BP45M-SC	60.58	56.26	-0/+0.37	63.63	73.03	3.4