

## Sterile orbital threaded union



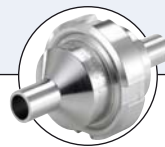
Hygienic Processing Components....



**Type BBS-3F**  
Flow indicator



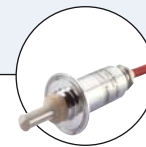
**Type BBS-04**  
Silicone hose



**Type BBS-10**  
Ball check valve



**Type 2103**  
Diaphragm valve



**Type 8221**  
Conductivity sensor



**Type 8650**  
Process Automation

- Optimum design according to recommendation of the ASME BPE Bioprocess directives
- Guaranteed crevice free
- Fully traceable wetted materials, also traceable seal available
- Part of the BBS modular system

The sterile orbital threaded union utilizes a design which ensures controlled compression of the O-ring seal.

Thereby a completely crevice free connection between the components is guaranteed. Consequently, no residues are possible, which contributes to increased process reliability and reduced purge times; the chance of solid waste in the system is also much less.

The sterile orbital threaded union is a part of the BBS modular system which simplifies spare parts storage and offers a high flexibility.

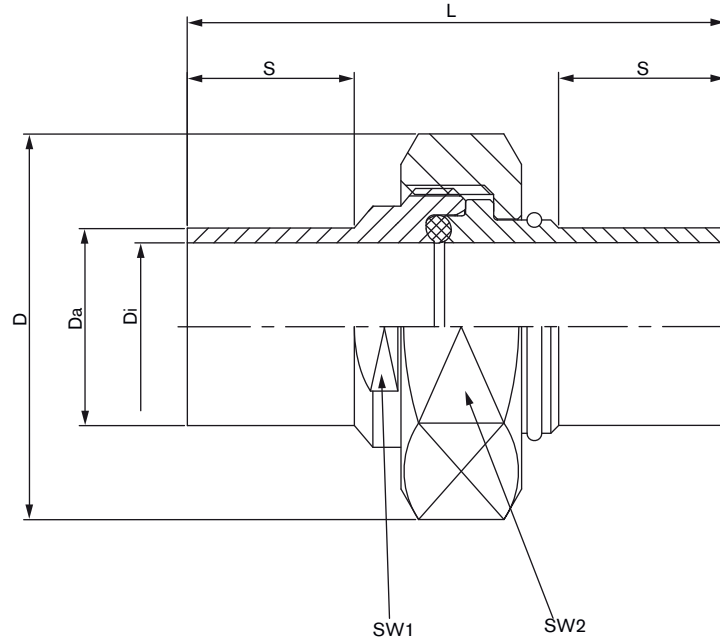
### Applications

- Biotechnology
- Pharmaceutical
- Chemical industry
- Dairy
- Food
- Cosmetic

Technical data	
<b>Available standard sizes</b>	ISO DN08 up to DN50 SMS DN06 up to DN50 BS-OD DN1/4" up to DN2" DIN DN06 up to DN50 Customized on request
<b>Material wetted parts</b>	Stainless steel 1.4435 BN2 (316L) Special materials e.g. Hastelloy 2.4602, Titanium, 1.4539 etc. on request
<b>Material dry parts</b>	1.4305 or equivalent
<b>Connection</b>	Metric fine pitch thread
<b>Seals</b>	O-Ring, EPDM, PTFE, special seal materials e.g. silicone, pure PTFE etc. on request
<b>Surface quality</b>	Wetted surface RA < Ra 0.8µm, electro-polished, finer surface on request
<b>Operation temperature</b>	-60 up to +200°C (depending on seal material)
<b>Ambient temperature</b>	-20 up to +80°C
<b>Media</b>	Gases or liquids
<b>Operation pressure</b>	-1 to +16 bar (in dependence on the temperature)
<b>Certification</b>	Material 3.1, FDA, USP VI

**Dimensions [mm]**

ISO dimensions sterile orbital threaded union

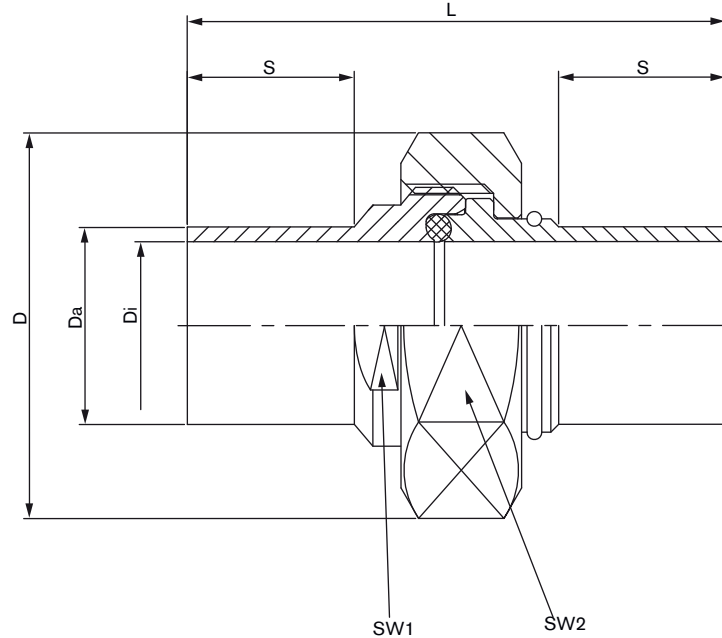


Size	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	SW1 [mm]	SW2 [mm]	Item no. EPDM	Item no. FEP
DN08	31.20	13.50	10.30	58.00	18.00	17.00	27.00	BBS-03-AD.N08.N00.35.0 (732 468)	BBS-03-AD.N08.N00.35.3 (732 472)
DN10	36.50	17.20	14.00	58.00	18.00	21.00	32.00	BBS-03-AD.N10.N00.35.0 (732 486)	BBS-03-AD.N10.N00.35.3 (732 490)
DN15	41.60	21.30	18.10	58.00	18.00	22.00	36.00	BBS-03-AD.N15.N00.35.0 (732 504)	BBS-03-AD.N15.N00.35.3 (732 510)
DN20	48.30	26.90	23.70	58.00	18.00	N/A	42.00 *	BBS-03-AD.N20.N00.35.0 (732 522)	BBS-03-AD.N20.N00.35.3 (732 526)
DN25	52.00	33.70	29.70	60.00	18.00	N/A	46.00 *	BBS-03-AD.N25.N00.35.0 (732 532)	BBS-03-AD.N25.N00.35.3 (732 536)
DN32	62.00	42.40	38.40	65.00	18.00	N/A	56.00 *	BBS-03-AD.N32.N00.35.0 (732 546)	BBS-03-AD.N32.N00.35.3 (732 551)
DN40	67.00	48.30	44.30	64.00	18.00	N/A	61.00 *	BBS-03-AD.N40.N00.35.0 (732 557)	BBS-03-AD.N40.N00.35.3 (732 563)
DN50	79.50	60.30	56.30	62.00	18.00	N/A	74.00 *	BBS-03-AC.N50.N00.35.0 (732 346)	BBS-03-AC.N50.N00.35.3 (732 350)

\* for hook wrench

**Dimensions [mm]**

SMS dimensions sterile orbital threaded union

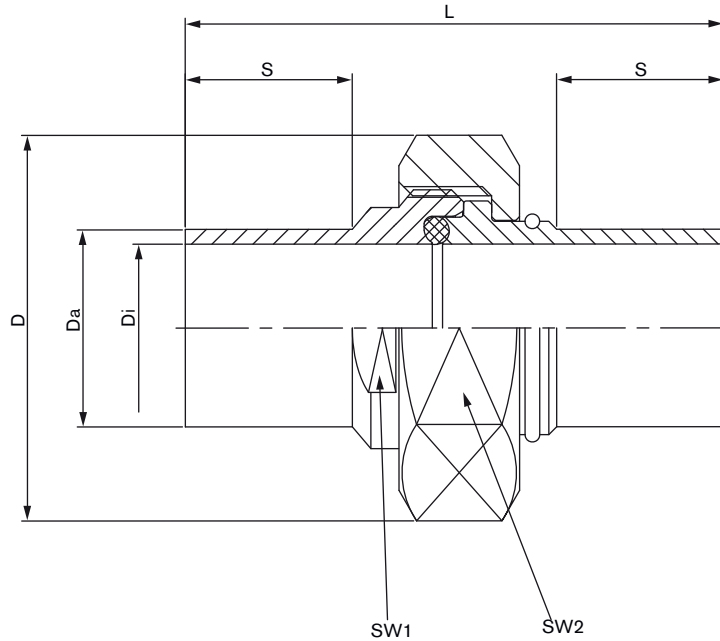


Size	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	SW1 [mm]	SW2 [mm]	Item no. EPDM	Item no. FEP
DN06	21.90	8.00	6.00	56.50	18.00	12.00	19.00	BBS-03-AD.E06.E00.35.0 (on request)	BBS-03-AD.E06.E00.35.3 (on request)
DN08	24.50	10.00	8.00	56.50	18.00	14.00	22.00	BBS-03-AD.E08.E00.35.0 (on request)	BBS-03-AD.E08.E00.35.3 (on request)
DN10	31.20	12.00	10.00	58.00	18.00	17.00	27.00	BBS-03-AD.E10.E00.35.0 (on request)	BBS-03-AD.E10.E00.35.3 (on request)
DN15	41.60	18.00	16.00	62.00	18.00	22.00	36.00	BBS-03-AD.E15.E00.35.0 (732 409)	BBS-03-AD.E15.E00.35.3 (on request)
DN20	41.60	22.00	20.00	62.00	18.00	22.00	36.00	BBS-03-AD.E20.E00.35.0 (732 411)	BBS-03-AD.E20.E00.35.3 (on request)
DN25	48.30	25.00	22.60	62.00	18.00	N/A	42.00 *	BBS-03-AD.E25.E00.35.0 (732 413)	BBS-03-AD.E25.E00.35.3 (732 415)
DN32	52.00	32.00	29.60	62.00	18.00	N/A	46.00 *	BBS-03-AD.E32.E00.35.0 (732 419)	BBS-03-AD.E32.E00.35.3 (on request)
DN40	62.00	38.00	35.60	68.00	18.00	N/A	56.00 *	BBS-03-AD.E40.E00.35.0 (732 421)	BBS-03-AD.E40.E00.35.3 (on request)
DN50	79.50	51.00	48.60	68.00	18.00	N/A	61.00 *	BBS-03-AC.E50.E00.35.0 (732 425)	BBS-03-AC.E50.E00.35.3 (on request)

\* for hook wrench

**Dimensions [mm]**

**BS-OD dimensions sterile orbital threaded union**

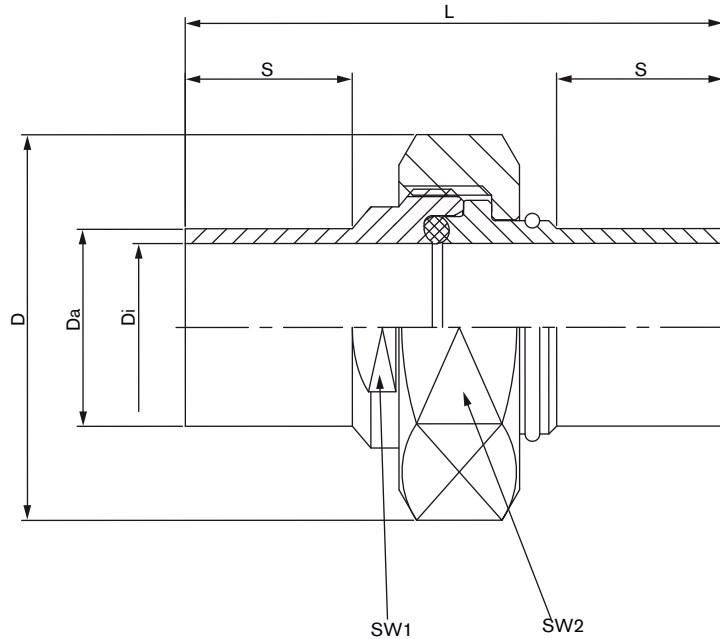


Size	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	SW1 [mm]	SW2 [mm]	Item no. EPDM	Item no. FEP
DN1/4"	21.90	6.35	4.57	55.80	18.00	12.00	19.00	BBS-03-AD.K02.K00.35.0 (732 431)	BBS-03-AD.K02.K00.35.3 (743 034)
DN3/8"	24.50	9.53	7.75	61.80	25.40	14.00	22.00	BBS-03-AD.K03.K00.35.0 (732 433)	BBS-03-AD.K03.K00.35.3 (732 435)
DN1/2"	31.20	12.70	9.40	64.50	25.40	17.00	27.00	BBS-03-AD.K05.K00.35.0 (732 437)	BBS-03-AD.K05.K00.35.3 (732 439)
DN3/4"	36.50	19.05	15.75	72.30	25.40	21.00	32.00	BBS-03-AD.K07.K00.35.0 (732 441)	BBS-03-AD.K07.K00.35.3 (732 443)
DN1"	48.30	25.40	22.10	74.00	25.40	N/A	42.00 *	BBS-03-AD.K10.K00.35.0 (732 445)	BBS-03-AD.K10.K00.35.3 (732 447)
DN1 1/2"	62.00	38.10	34.80	68.60	18.00	N/A	56.00 *	BBS-03-AD.K15.K00.35.0 (732 449)	BBS-03-AD.K15.K00.35.3 (732 451)
DN2"	75.00	50.80	47.50	87.70	25.40	N/A	61.00 *	BBS-03-AD.K20.K00.35.0 (732 458)	BBS-03-AD.K20.K00.35.3 (732 460)

\* for hook wrench

**Dimensions [mm]**

**DIN dimensions sterile orbital threaded union**



Size	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	SW1 [mm]	SW2 [mm]	Item no. EPDM	Item no. FEP
DN06	21.90	8.00	6.00	55.50	18.00	12.00	19.00	BBS-03-AD.D06.D00.35.0 (732 358)	BBS-03-AD.D06.D00.35.3 (732 364)
DN08	24.50	10.00	8.00	56.50	18.00	14.00	22.00	BBS-03-AD.D08.D00.35.0 (732 366)	BBS-03-AD.D08.D00.35.3 (732 370)
DN10	31.20	12.00	10.00	58.00	18.00	17.00	27.00	BBS-03-AD.D10.D00.35.0 (732 374)	BBS-03-AD.D10.D00.35.3 (732 381)
DN15	41.60	19.00	16.00	60.00	18.00	22.00	36.00	BBS-03-AD.D15.D00.35.0 (732 385)	BBS-03-AD.D15.D00.35.3 (732 387)
DN20	48.30	23.00	20.00	62.00	18.00	N/A	42.00 *	BBS-03-AD.D20.D00.35.0 (732 389)	BBS-03-AD.D20.D00.35.3 (732 391)
DN25	52.00	29.00	26.00	60.00	18.00	N/A	46.00 *	BBS-03-AD.D25.D00.35.0 (732 393)	BBS-03-AD.D25.D00.35.3 (732 395)
DN32	62.00	35.00	32.00	68.00	18.00	N/A	56.00 *	BBS-03-AD.D32.D00.35.0 (732 397)	BBS-03-AD.D32.D00.35.3 (732 399)
DN40	62.00	41.00	38.00	65.00	18.00	N/A	56.00 *	BBS-03-AD.D40.D00.35.0 (732 401)	BBS-03-AD.D40.D00.35.3 (732 403)
DN50	79.50	53.00	50.00	68.00	18.00	N/A	61.00 *	BBS-03-AD.D50.D00.35.0 (732 405)	BBS-03-AD.D50.D00.35.3 (732 407)

\* for hook wrench

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