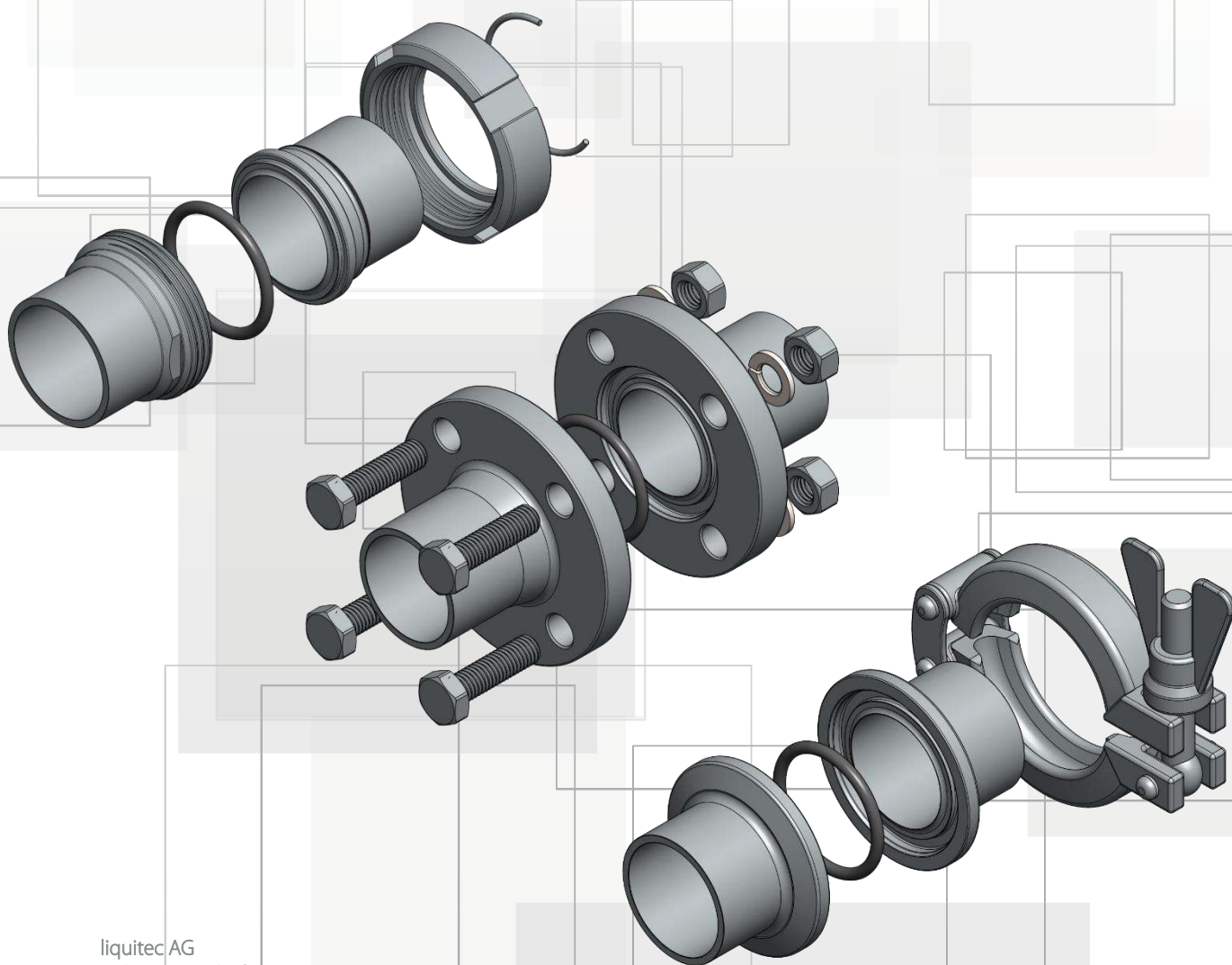


bio-plus® Sterilverbindung

bio-plus® Sterile Connection



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1 Technische Daten Technical Data

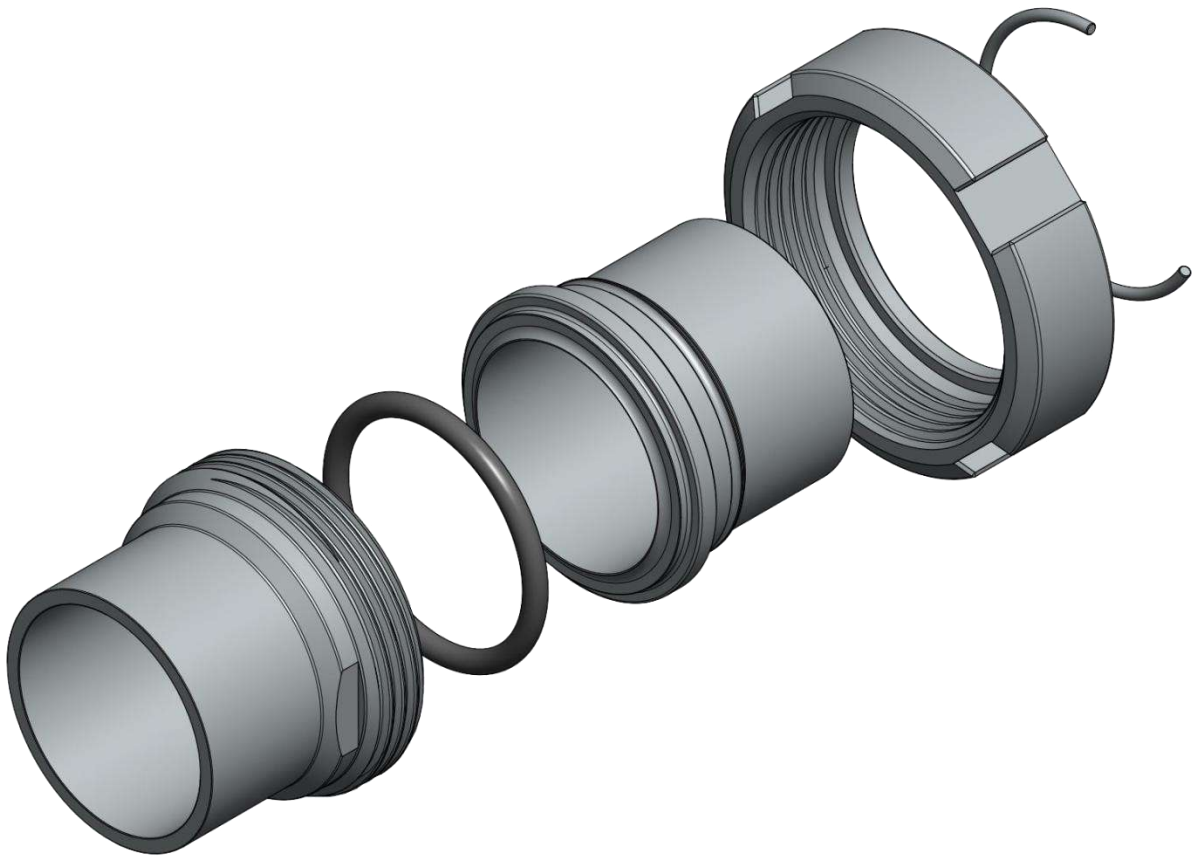
	Standard-Baugrößen	Betriebsdruck
bio-plus® Steril Verschraubung	- DIN04 - DIN40 - ISO06 - ISO40 - OD$\frac{1}{4}$" - OD2" - SMS04 - SMS40	- DIN04 - DIN40 = 16 bar - ISO06 - ISO40 = 16 bar - OD$\frac{1}{4}$" - OD2" = 16 bar - SMS04 - SMS40 = 16 bar
bio-plus® Steril Flanschverbindung	- DIN10 - DIN100 - ISO08 - ISO100 - OD$\frac{1}{2}$" - OD4" - SMS10 - SMS100	- DIN10 - DIN40 = 25 bar - DIN50 - DIN100 = 16 bar - ISO08 - ISO25 = 25 bar - ISO32 - ISO80 = 16 bar - ISO100 = 10 bar - OD$\frac{1}{2}$" - OD1$\frac{1}{2}$" = 25 bar - OD2" - OD4" = 16 bar - SMS10 - SMS50 = 25 bar - SMS65 - SMS100 = 10 bar
bio-plus® Steril Grossflanschverbindung	- DIN125 - DIN300 - ISO125 - ISO300 - OD6" - OD12"	> DIN100 = 10 bar > ISO100 = 10 bar > 6" = 10 bar
bio-plus® Steril Klemmverbindung	- DIN04 - DIN100 - ISO06 - ISO100 - OD$\frac{1}{4}$" - OD4" - SMS04 - SMS100	- DIN04 - DIN32 = 16 bar - DIN40 - DIN100 = 8 bar - ISO06 - DIN25 = 16 bar - ISO32 - DIN100 = 8 bar - OD$\frac{1}{4}$" - OD1$\frac{1}{2}$" = 16 bar - OD2" - OD4" = 8 bar - SMS06 - SMS32 = 16 bar - SMS40 - SMS100 = 8 bar
Werkstoffe	Produktberührt: 1.4435 BN2 (316L) - Sonderwerkstoffe 2.4602, Titan, 1.4539 etc. gem. Bestellschlüssel Nicht produktberührt: 1.4305 oder gleichwertig	
Dichtungswerkstoffe	- EPDM - FEP / Silikon - FKM - Sonderdichtwerkstoffe gem. Bestellschlüssel	
Oberflächen	Produktberührte Oberflächen: - elektropoliert Ra < 0,6µm - andere Oberflächen gem. Bestellschlüssel Nicht produktberührte Oberflächen: - elektropoliert Ra > 1,6µm	
Rückverfolgbarkeit	Alle produktberührten Teile markiert mit Artikelnummer, Werkstoff und Chargennummer	
Medien	Gase und Flüssigkeiten	

Betriebstemperatur Dichtungswerkstoffe	• EPDM: -40°C bis +150°C, kurzzeitig bis +160°C • FEP / Silikon: -60°C bis +200°C, kurzzeitig bis +230°C • FKM: -20°C bis +200°C, kurzzeitig bis +230°C
Normen	Rohranschlussmaße: • DIN (DIN11866 Reihe A) • ISO (DIN11866 Reihe B) • OD (DIN11866 Reihe C) • SMS (SMS 3008)
Zertifikate	Produktberührte Teile: • EN 10204 / 3.1 Dichtungswerkstoffe: • FDA-Konformität, USP-Class VI, TSE-frei

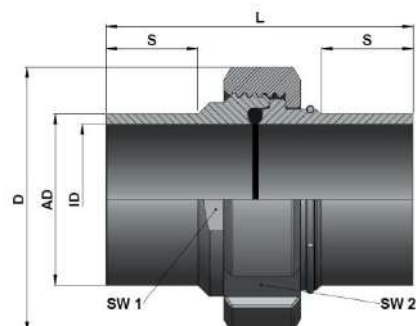
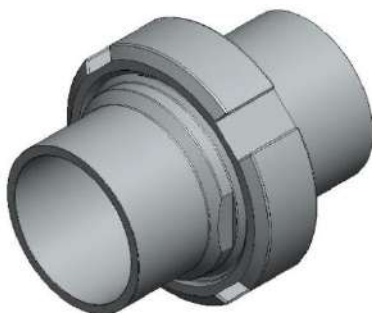
	Standard sizes	Operating pressure
bio-plus® Sterile Screw Union	- DIN04 - DIN40 - ISO06 - ISO40 - OD$\frac{1}{4}$" - OD2" - SMS04 - SMS40	- DIN04 - DIN40 = 16 bar - ISO06 - ISO40 = 16 bar - OD$\frac{1}{4}$" - OD2" = 16 bar - SMS04 - SMS40 = 16 bar
bio-plus® Sterile Flange Connection	- DIN10 - DIN100 - ISO08 - ISO100 - OD$\frac{1}{2}$" - OD4" - SMS10 - SMS100	- DIN10 - DIN40 = 25 bar - DIN50 - DIN100 = 16 bar - ISO08 - ISO25 = 25 bar - ISO32 - ISO80 = 16 bar - ISO100 = 10 bar - OD$\frac{1}{2}$" - OD1$\frac{1}{2}$" = 25 bar - OD2" - OD4" = 16 bar - SMS10 - SMS50 = 25 bar - SMS65 - SMS100 = 10 bar
bio-plus® Sterile Large Flange Connection	- DIN125 - DIN300 - ISO125 - ISO300 - OD6" - OD12"	> DIN100 = 10 bar > ISO100 = 10 bar > 6" = 10 bar
bio-plus® Sterile Clamp Union	- DIN04 - DIN100 - ISO06 - ISO100 - OD$\frac{1}{4}$" - OD4" - SMS04 - SMS100	- DIN04 - DIN32 = 16 bar - DIN40 - DIN100 = 8 bar - ISO06 - DIN25 = 16 bar - ISO32 - DIN100 = 8 bar - OD$\frac{1}{4}$" - OD1$\frac{1}{2}$" = 16 bar - OD2" - OD4" = 8 bar - SMS06 - SMS32 = 16 bar - SMS40 - SMS100 = 8 bar
Material	Medium contacted: 1.4435 BN2 (316L) - Special materials e.g. 2.4602, Titan, 1.4539 etc. acc. order key Non medium contacted: 1.4305 or equivalent	
Gasket	- EPDM - FEP (Silicone core) - FKM - Special materials acc. ordering key	
Surface quality	Medium contacted: - electro polished Ra < 0,6µm - other qualities acc. ordering key Non medium contacted: - electro polished Ra > 1,6µm	
Traceability	Product contacted material marked with article no., material and heat no.	
Media	Gases and liquids	
Operating temperature gaskets	- EPDM: -40°C to +150°C, short time up +160°C - FEP (Silicone core): -60°C to +200°C, short time up +230°C - FKM: -20°C to +200°C, short time up +230°C	

Applicable standards	Pipe dimensions: • DIN (DIN11866 series A) • ISO (DIN11866 series B) • OD (DIN11866 series C) • SMS (SMS 3008)
Certification	Medium contacted: • EN 10204 / 3.1 Medium contacted gaskets: • FDA-conform, USP-Class VI, TSE-free

2 **bio-plus® Steril Verschraubung**
bio-plus® Sterile Screw Union



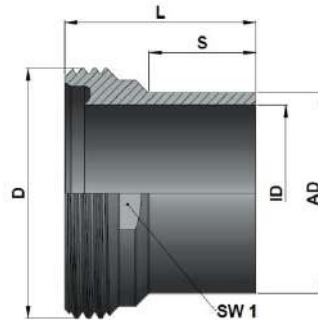
2.1 bio-plus® Verschraubung komplett EPDM / bio-plus® Screw Union complete EPDM



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]	SW 1 [mm]	SW 2 [mm]	Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	AD.D04.35.0.C	6.00	4.00	55.80	18.00	21.90	12.00	19.00	0.04
	DIN06	AD.D06.35.0.C	8.00	6.00	55.50	18.00	21.90	12.00	19.00	0.04
	DIN08	AD.D08.35.0.C	10.00	8.00	58.00	18.00	24.50	14.00	22.00	0.05
	DIN10	AD.D10.35.0.C	13.00	10.00	58.00	18.00	30.50	17.00	27.00	0.08
	DIN15	AD.D15.35.0.C	19.00	16.00	58.00	18.00	41.30	n.a.	36.00	0.13
	DIN20	AD.D20.35.0.C	23.00	20.00	60.00	18.00	48.30	n.a.	*42.00	0.20
	DIN25	AD.D25.35.0.C	29.00	26.00	60.00	18.00	52.00	n.a.	*46.00	0.24
	DIN32	AD.D32.35.0.C	35.00	32.00	65.00	18.00	62.00	n.a.	*56.00	0.40
	DIN40	AD.D40.35.0.C	41.00	38.00	65.00	18.00	62.00	n.a.	*56.00	0.34
ISO Abmessung ISO Dimension	ISO06	AD.N06.35.0.C	10.20	7.00	58.00	18.00	24.50	14.00	22.00	0.05
	ISO08	AD.N08.35.0.C	13.50	10.30	58.00	18.00	31.00	17.00	27.00	0.08
	ISO10	AD.N10.35.0.C	17.20	14.00	58.00	18.00	36.50	19.00	32.00	0.11
	ISO15	AD.N15.35.0.C	21.30	18.10	58.00	18.00	41.30	22.00	36.00	0.13
	ISO20	AD.N20.35.0.C	26.90	23.70	58.00	18.00	48.30	n.a.	*42.00	0.18
	ISO25	AD.N25.35.0.C	33.70	29.70	60.00	18.00	52.00	n.a.	*46.00	0.23
	ISO32	AD.N32.35.0.C	42.40	38.40	65.00	18.00	62.00	n.a.	*56.00	0.36
	ISO40	AD.N40.35.0.C	48.30	44.30	65.00	18.00	67.00	n.a.	*61.00	0.39
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	AD.K02.35.0.C	6.35	4.57	55.80	18.00	21.90	12.00	19.00	0.04
	OD $\frac{3}{8}$ "	AD.K03.35.0.C	9.53	7.75	58.00	18.00	24.50	14.00	22.00	0.05
	OD $\frac{1}{2}$ "	AD.K05.35.0.C	12.70	9.40	58.00	18.00	30.50	17.00	27.00	0.08
	OD $\frac{3}{4}$ "	AD.K07.35.0.C	19.05	15.75	58.00	18.00	36.50	21.00	32.00	0.11
	OD1"	AD.K10.35.0.C	25.40	22.10	58.00	18.00	48.30	n.a.	*42.00	0.20
	OD1 $\frac{1}{2}$ "	AD.K15.35.0.C	38.10	34.80	65.00	18.00	62.00	n.a.	*56.00	0.39
	OD2"	AD.K20.35.0.C	50.80	47.50	65.00	18.00	79.50	n.a.	*74.00	0.63
SMS Abmessung SMS Dimension	SMS06	AD.E06.35.0.C	8.00	6.00	55.20	18.00	21.70	12.00	19.00	0.04
	SMS08	AD.E08.35.0.C	10.00	8.00	57.20	18.00	24.50	14.00	22.00	0.05
	SMS10	AD.E10.35.0.C	12.00	10.00	58.00	18.00	31.00	17.00	27.00	0.07
	SMS15	AD.E15.35.0.C	18.00	16.00	58.00	18.00	41.30	n.a.	36.00	0.13
	SMS20	AD.E20.35.0.C	22.00	20.00	60.00	18.00	48.30	n.a.	*42.00	0.19
	SMS25	AD.E25.35.0.C	25.00	22.60	60.00	18.00	48.30	n.a.	*42.00	0.18
	SMS32	AD.E32.35.0.C	32.00	29.60	60.00	18.00	52.00	n.a.	*46.00	0.21
	SMS40	AD.E40.35.0.C	38.00	35.60	65.00	18.00	62.00	n.a.	*56.00	0.36

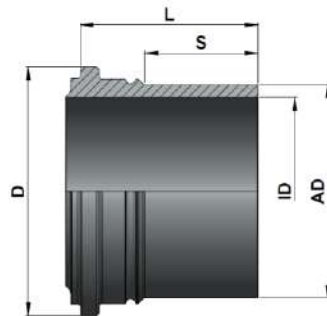
*für Hakenschlüssel

2.2 bio-plus® Gewindestutzen bio-plus® Thread Ferrule



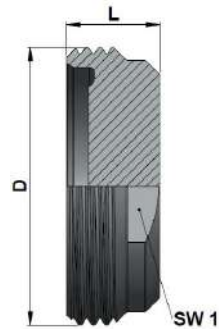
	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]	SW 1 [mm]		Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	B3.D04.35.C	6.00	4.00	28.00	18.00	M16x1.5	12.00		0.01
	DIN06	B3.D06.35.C	8.00	6.00	28.00	18.00	M16x1.5	12.00		0.01
	DIN08	B3.D08.35.C	10.00	8.00	30.00	18.00	M18x1.5	14.00		0.02
	DIN10	B3.D10.35.C	13.00	10.00	30.00	18.00	M22x1.5	17.00		0.03
	DIN15	B3.D15.35.C	19.00	16.00	30.00	18.00	M30x2.0	n.a.		0.04
	DIN20	B3.D20.35.C	23.00	20.00	32.00	18.00	M36x2.0	n.a.		0.07
	DIN25	B3.D25.35.C	29.00	26.00	32.00	18.00	M42x2.0	n.a.		0.08
	DIN32	B3.D32.35.C	35.00	32.00	34.00	18.00	M52x2.0	n.a.		0.14
	DIN40	B3.D40.35.C	41.00	38.00	34.00	18.00	M52x2.0	n.a.		0.12
ISO Abmessung ISO Dimension	ISO06	B3.N06.35.C	10.20	7.00	30.00	18.00	M18x1.5	14.00		0.02
	ISO08	B3.N08.35.C	13.50	10.30	30.00	18.00	M22x1.5	17.00		0.03
	ISO10	B3.N10.35.C	17.20	14.00	30.00	18.00	M26x1.5	19.00		0.03
	ISO15	B3.N15.35.C	21.30	18.10	30.00	18.00	M30x2.0	22.00		0.04
	ISO20	B3.N20.35.C	26.90	23.70	30.00	18.00	M36x2.0	n.a.		0.05
	ISO25	B3.N25.35.C	33.70	29.70	32.00	18.00	M42x2.0	n.a.		0.08
	ISO32	B3.N32.35.C	42.40	38.40	34.00	18.00	M52x2.0	n.a.		0.12
	ISO40	B3.N40.35.C	48.30	44.30	34.00	18.00	M56x2.0	n.a.		0.12
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	B3.K02.35.C	6.35	4.57	28.00	18.00	M16x1.5	12.00		0.01
	OD $\frac{3}{8}$ "	B3.K03.35.C	9.53	7.75	30.00	18.00	M18x1.5	14.00		0.02
	OD $\frac{1}{2}$ "	B3.K05.35.C	12.70	9.40	30.00	18.00	M22x1.5	17.00		0.03
	OD $\frac{3}{4}$ "	B3.K07.35.C	19.05	15.75	30.00	18.00	M26x1.5	21.00		0.04
	OD1"	B3.K10.35.C	25.40	22.10	34.00	18.00	M36x2.0	n.a.		0.06
	OD1 $\frac{1}{2}$ "	B3.K15.35.C	38.10	34.80	34.00	18.00	M52x2.0	n.a.		0.14
	OD2"	B3.K20.35.C	50.80	47.50	42.70	18.00	M68x2.0	n.a.		0.24
SMS Abmessung SMS Dimension	SMS06	B3.E06.35.C	8.00	6.00	28.00	18.00	M16x1.5	12.00		0.01
	SMS08	B3.E08.35.C	10.00	8.00	30.00	18.00	M18x1.5	14.00		0.02
	SMS10	B3.E10.35.C	12.00	10.00	30.00	18.00	M22x1.5	17.00		0.02
	SMS15	B3.E15.35.C	18.00	16.00	30.00	18.00	M30x2.0	n.a.		0.04
	SMS20	B3.E20.35.C	22.00	20.00	32.00	18.00	M36x2.0	n.a.		0.06
	SMS25	B3.E25.35.C	25.00	22.60	32.00	18.00	M36x2.0	n.a.		0.06
	SMS32	B3.E32.35.C	32.00	29.60	32.00	18.00	M42x2.0	n.a.		0.07
	SMS40	B3.E40.35.C	38.00	35.60	35.0.A0	18.00	M52x2.0	n.a.		0.12

2.3 bio-plus® Bundstutzen bio-plus® Female Ferrule



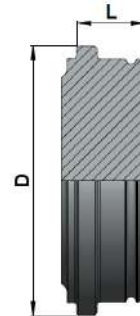
	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	A3.D04.35.C	6.00	4.00	27.80	18.00	13.80			0.01
	DIN06	A3.D06.35.C	8.00	6.00	27.50	18.00	13.80			0.01
	DIN08	A3.D08.35.C	10.00	8.00	28.00	18.00	15.80			0.01
	DIN10	A3.D10.35.C	13.00	10.00	28.00	18.00	19.80			0.02
	DIN15	A3.D15.35.C	19.00	16.00	28.00	18.00	27.40			0.04
	DIN20	A3.D20.35.C	23.00	20.00	28.00	18.00	33.70			0.05
	DIN25	A3.D25.35.C	29.00	26.00	28.00	18.00	39.30			0.06
	DIN32	A3.D32.35.C	35.00	32.00	31.00	18.00	49.00			0.11
	DIN40	A3.D40.35.C	41.00	38.00	31.00	18.00	49.00			0.80
ISO Abmessung ISO Dimension	ISO06	A3.N06.35.C	10.20	7.00	28.00	18.00	15.80			0.01
	ISO08	A3.N08.35.C	13.50	10.30	28.00	18.00	19.80			0.02
	ISO10	A3.N10.35.C	17.20	14.00	28.00	18.00	24.20			0.03
	ISO15	A3.N15.35.C	21.30	18.10	28.00	18.00	27.40			0.03
	ISO20	A3.N20.35.C	26.90	23.70	28.00	18.00	33.70			0.04
	ISO25	A3.N25.35.C	33.70	29.70	28.00	18.00	39.30			0.06
	ISO32	A3.N32.35.C	42.40	38.40	31.00	18.00	49.00			0.09
	ISO40	A3.N40.35.C	48.30	44.30	31.00	18.00	54.00			0.10
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	A3.K02.35.C	6.35	4.57	27.80	18.00	13.80			0.01
	OD $\frac{3}{8}$ "	A3.K03.35.C	9.53	7.75	28.00	18.00	15.80			0.01
	OD $\frac{1}{2}$ "	A3.K05.35.C	12.70	9.40	28.00	18.00	19.80			0.02
	OD $\frac{3}{4}$ "	A3.K07.35.C	19.05	15.75	28.00	18.00	24.20			0.03
	OD1"	A3.K10.35.C	25.40	22.10	28.00	18.00	33.70			0.05
	OD1 $\frac{1}{2}$ "	A3.K15.35.C	38.10	34.80	31.00	18.00	49.00			0.11
	OD2"	A3.K20.35.C	50.80	47.50	31.00	18.00	65.20			0.18
SMS Abmessung SMS Dimension	SMS06	A3.E06.35.C	6.00	4.00	27.50	18.00	13.80			0.01
	SMS08	A3.E08.35.C	8.00	6.00	27.20	18.00	15.80			0.01
	SMS10	A3.E10.35.C	10.00	8.00	27.20	18.00	19.80			0.01
	SMS15	A3.E15.35.C	12.00	10.00	28.00	18.00	27.40			0.02
	SMS20	A3.E20.35.C	22.00	20.00	28.00	18.00	33.70			0.04
	SMS25	A3.E25.35.C	25.00	22.60	28.00	18.00	33.70			0.04
	SMS32	A3.E32.35.C	32.00	29.60	28.00	18.00	39.30			0.05
	SMS40	A3.E40.35.C	38.00	35.60	31.00	18.00	49.00			0.09

2.4 bio-plus® Gewindeblinddeckel bio-plus® Thread End Cap



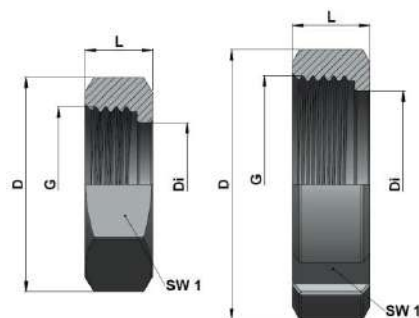
	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]	SW 1 [mm]					Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	F0.D04.35.C	M16x1.5	10.00	12.00					0.01
	DIN06	F0.D06.35.C	M16x1.5	10.00	12.00					0.01
	DIN08	F0.D08.35.C	M18x1.5	10.00	14.00					0.01
	DIN10	F0.D10.35.C	M22x1.5	12.00	17.00					0.03
	DIN15	F0.D15.35.C	M30x2.0	12.00	22.00					0.05
	DIN20	F0.D20.35.C	M36x2.0	12.00	30.00					0.07
	DIN25	F0.D25.35.C	M42x2.0	15.00	36.00					0.13
	DIN32	F0.D32.35.C	M52x2.0	18.00	46.00					0.25
	DIN40	F0.D40.35.C	M52x2.0	18.00	46.00					0.24
ISO Abmessung ISO Dimension	ISO06	F0.N06.35.C	M18x1.5	11.00	14.00					0.01
	ISO08	F0.N08.35.C	M22x1.5	13.00	17.00					0.02
	ISO10	F0.N10.35.C	M26x1.5	13.00	19.00					0.04
	ISO15	F0.N15.35.C	M30x2.0	12.00	22.00					0.05
	ISO20	F0.N20.35.C	M36x2.0	12.00	30.00					0.07
	ISO25	F0.N25.35.C	M42x2.0	15.00	36.00					0.12
	ISO32	F0.N32.35.C	M52x2.0	16.00	46.00					0.24
	ISO40	F0.N40.35.C	M56x2.0	16.00	50.00					0.28
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	F0.K02.35.C	M16x1.5	10.00	12.00					0.01
	OD $\frac{3}{8}$ "	F0.K03.35.C	M18x1.5	10.00	14.00					0.01
	OD $\frac{1}{2}$ "	F0.K05.35.C	M22x1.5	12.00	17.00					0.03
	OD $\frac{3}{4}$ "	F0.K07.35.C	M26x1.5	12.00	21.00					0.03
	OD1"	F0.K10.35.C	M36x2.0	12.00	30.00					0.07
	OD1 $\frac{1}{2}$ "	F0.K15.35.C	M52x2.0	18.00	46.00					0.24
	OD2"	F0.K20.35.C	M68x2.0	18.00	60.00					0.42
SMS Abmessung SMS Dimension	SMS06	F0.E06.35.C	M16x1.5	10.00	12.00					0.01
	SMS08	F0.E08.35.C	M18x1.5	10.00	14.00					0.01
	SMS10	F0.E10.35.C	M22x1.5	12.00	17.00					0.03
	SMS15	F0.E15.35.C	M30x2.0	12.00	24.00					0.05
	SMS20	F0.E20.35.C	M36x2.0	12.00	30.00					0.07
	SMS25	F0.E25.35.C	M36x2.0	12.00	30.00					0.07
	SMS32	F0.E32.35.C	M42x2.0	15.00	36.00					0.12
	SMS40	F0.E40.35.C	M52x2.0	18.00	46.00					0.25

2.5 bio-plus® Bundblinddeckel bio-plus® Female End Cap



	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]						Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	G1.D04.35.C	13.80	9.00						0.01
	DIN06	G1.D06.35.C	13.80	10.00						0.01
	DIN08	G1.D08.35.C	15.80	10.00						0.01
	DIN10	G1.D10.35.C	19.80	10.00						0.02
	DIN15	G1.D15.35.C	27.40	10.00						0.04
	DIN20	G1.D20.35.C	33.70	10.00						0.06
	DIN25	G1.D25.35.C	39.30	10.00						0.10
	DIN32	G1.D32.35.C	49.00	13.00						0.19
	DIN40	G1.D40.35.C	49.00	13.00						0.19
ISO Abmessung ISO Dimension	ISO06	G1.N06.35.C	15.80	10.00						0.01
	ISO08	G1.N08.35.C	19.80	10.00						0.02
	ISO10	G1.N10.35.C	24.20	10.00						0.03
	ISO15	G1.N15.35.C	27.40	10.00						0.04
	ISO20	G1.N20.35.C	33.70	10.00						0.07
	ISO25	G1.N25.35.C	39.30	10.00						0.10
	ISO32	G1.N32.35.C	49.00	13.00						0.19
	ISO40	G1.N40.35.C	54.00	13.00						0.25
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	G1.K02.35.C	13.80	9.00						0.01
	OD $\frac{3}{8}$ "	G1.K03.35.C	15.80	10.00						0.01
	OD $\frac{1}{2}$ "	G1.K05.35.C	19.80	10.00						0.02
	OD $\frac{3}{4}$ "	G1.K07.35.C	24.20	10.00						0.04
	OD1"	G1.K10.35.C	33.70	10.00						0.06
	OD1 $\frac{1}{2}$ "	G1.K15.35.C	49.00	13.00						0.19
	OD2"	G1.K20.35.C	65.20	13.00						0.35
SMS Abmessung SMS Dimension	SMS06	G1.E06.35.C	13.80	10.00						0.01
	SMS08	G1.E08.35.C	15.80	10.00						0.01
	SMS10	G1.E10.35.C	19.80	10.00						0.02
	SMS15	G1.E15.35.C	27.40	10.00						0.04
	SMS20	G1.E20.35.C	33.70	10.00						0.06
	SMS25	G1.E25.35.C	33.70	10.00						0.07
	SMS32	G1.E32.35.C	39.30	10.00						0.10
	SMS40	G1.E40.35.C	49.00	13.00						0.19

2.6 bio-plus® Überwurfmutter bio-plus® Groove Nut



DIN11866A	DIN11866B	DIN11866C	SMS	Artikel-Nr. Article-No.	D	G	L	Di	SW	Gewicht Weight
DIN	ISO	OD			[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
DIN04 DIN06		OD $\frac{1}{4}$ "	SMS06	C0.D06.05	21.70	M16x1.5	12.00	10.40	19.00	0.02
DIN08	ISO06	OD $\frac{3}{8}$ "	SMS08	C0.D08.05	24.50	M18x1.5	12.00	13.80	22.00	0.02
DIN10	ISO08	OD $\frac{1}{2}$ "	SMS10	C0.N08.05	31.00	M22x1.5	12.00	15.50	27.00	0.03
	ISO10	OD $\frac{3}{4}$ "		C0.N10.05	36.50	M26.1.5	13.00	21.40	32.00	0.04
DIN15	ISO15		SMS15	C0.N15.05	41.30	M30x2.0	13.00	23.90	36.00	0.05
DIN20	ISO20	OD1"	SMS20 SMS25	C0.N20.05	48.30	M36x2.0	13.00	28.50	*42.00	0.09
DIN25	ISO25		SMS32	C0.N25.05	52.00	M42x2.0	15.00	36.00	*46.00	0.09
DIN32 DIN40	ISO32	OD1 $\frac{1}{2}$ "	SMS40	C0.N32.05	62.00	M52x2.0	18.00	44.00	*56.00	0.14
	ISO40			C1.N40.05	67.00	M56x2.0	18.00	50.10	*61.00	0.17
	ISO50	OD2"		C0.N50.05	79.50	M68x2.0	18.00	60.70	*74.00	0.22

2.7 bio-plus® Sicherungsring bio-plus® Retaining Ring



DIN11866A	DIN11866B	DIN11866C	SMS	Artikel-Nr. Article-No.	D [mm]					Gewicht Weight [kg]
DIN	ISO	OD								
DIN04 DIN06		OD $\frac{1}{4}$ "	SMS06	02.D06.A2	9.00					0.02
DIN08	ISO06	OD $\frac{3}{8}$ "	SMS08	02.D08.A2	10.80					0.02
DIN10	ISO08	OD $\frac{1}{2}$ "	SMS10	02.D10.A2	13.00					0.03
	ISO10	OD $\frac{3}{4}$ "		02.N10.A2	18.00					0.04
DIN15	ISO15		SMS15	02.N15.A2	21.00					0.05
DIN20	ISO20	OD1"	SMS20 SMS25	02.N20.A2	26.00					0.09
DIN25	ISO25		SMS32	02.N25.A2	32.00					0.09
DIN32 DIN40	ISO32	OD1 $\frac{1}{2}$ "	SMS40	02.N32.A2	42.00					0.14
	ISO40			02.N40.A2	45.00					0.17
	ISO50	OD2"		02.N50.A2	55.00					0.22

2.8 bio-plus® O-Ring

bio-plus® O-Ring



	Größe Size	Artikel-Nr. EPDM Article-No. EPDM	Artikel-Nr. FEP / Silikon Article-No. FEP (Silicone core)	Artikel-Nr. FKM Article-No. FKM
DIN Abmessung DIN Dimension	DIN04	01.D04.0	01.D04.3	01.D04.2
	DIN06	01.D06.0	01.D06.3	01.D06.2
	DIN08	01.D08.0	01.D08.3	01.D08.2
	DIN10	01.N08.0	01.N08.3	01.N08.2
	DIN15	01.K07.0	01.K07.3	01.K07.2
	DIN20	01.D20.0	01.D20.3	01.D20.2
	DIN25	01.D25.0	01.D25.3	01.D25.2
	DIN32	01.D32.0	01.D32.3	01.D32.2
	DIN40	01.D40.0	01.D40.3	01.D40.2
ISO Abmessung ISO Dimension	ISO06	01.N06.0	01.N06.3	01.N06.2
	ISO08	01.N08.0	01.N08.3	01.N08.2
	ISO10	01.N10.0	01.N10.3	01.N10.2
	ISO15	01.N15.0	01.N15.3	01.N15.2
	ISO20	01.N20.0	01.N20.3	01.N20.2
	ISO25	01.N25.0	01.N25.3	01.N25.2
	ISO32	01.N32.0	01.N32.3	01.N32.2
	ISO40	01.N40.0	01.N40.3	01.N40.2
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	01.K02.0	01.K02.3	01.K02.2
	OD $\frac{3}{8}$ "	01.D08.0	01.D08.3	01.D08.2
	OD $\frac{1}{2}$ "	01.K05.0	01.K05.3	01.K05.2
	OD $\frac{3}{4}$ "	01.K07.0	01.K07.3	01.K07.2
	OD1"	01.K10.0	01.K10.3	01.K10.2
	OD1 $\frac{1}{2}$ "	01.K15.0	01.K15.3	01.K15.2
	OD2"	01.K20.0	01.K20.3	01.K20.2
SMS Abmessung SMS Dimension	SMS06	01.D06.0	01.D06.3	01.D06.2
	SMS08	01.D08.0	01.D08.3	01.D08.2
	SMS10	01.N08.0	01.N08.3	01.N08.2
	SMS15	01.K07.0	01.K07.3	01.K07.2
	SMS20	01.D20.0	01.D20.3	01.D20.2
	SMS25	01.K10.0	01.K10.3	01.K10.2
	SMS32	01.N25.0	01.N25.3	01.N25.2
	SMS40	01.E40.0	01.E40.3	01.E40.2

2.9 bio-plus® erweitertes Produktsortiment bio-plus® extended Product Range

K0	Gewindestutzen Reduktion	L0	Gewindestutzen Erweiterung	B3.N10.R05	Gewindestutzen mit Rohrgewinde aussen (Rohrgewinde konisch nach ISO 7-1)	B3.N10.G05	Gewindestutzen mit Rohrgewinde innen (Rohrgewinde zylindrisch nach ISO 228-1)
	Thread Ferrule Reduction		Thread Ferrule Enlargement		Thread Ferrule with pipe thread outside (Pipe thread tapered acc. ISO 7-1)		Thread Ferrule with pipe thread inside (Pipe thread cylindrical acc. ISO 228-1)

I1	Bundstutzen Reduktion	M1	Bundstutzen Erweiterung	A3.N10.R05	Bundstutzen mit Rohrgewinde aussen (Rohrgewinde konisch nach ISO 7-1)	A3.N10.G05	Bundstutzen mit Rohrgewinde innen (Rohrgewinde zylindrisch nach ISO 228-1)
	Female Ferrule Reduction		Female Ferrule Enlargement		Female Ferrule with pipe thread outside (Pipe thread tapered acc. ISO 7-1)		Female Ferrule with pipe thread inside (Pipe thread cylindrical acc. ISO 228-1)

E0	Gewinde- Endstutzen	H1	Bund- Endstutzen
	Thread Solid-end Ferrule		Female Solid-end Ferrule

2.10 Bestellschlüssel Ordering Key

1. Artikel / Article

AD	Verschraubung kompl. mit Sicherung / Screw Union compl. with retaining ring
A3	Bundstutzen / Male Ferrule
A6	Bundstutzen / Male Ferrule
B3	Gewindestutzen / Thread Ferrule
B6	Gewindestutzen / Thread Ferrule
F0	Gewindeblinddeckel / Thread End Cap
G1	Bundblinddeckel mit Sicherung / Male End Cap
C0	Überwurfmutter / Groove Nut
01	O-Ring / O-Ring
02	Sicherungsringe / Retaining Ring

weitere Ausführungen

I1	Bundstutzen Reduktion / Male Ferrule Reduction
K0	Gewindestutzen Reduktion / Thread Ferrule Reduction
M1	Bundstutzen Erweiterung / Male Ferrule Enlargement
L0	Gewindestutzen Erweiterung / Thread Ferrule Enlargement
A3.N10.R00	Bundstutzen mit Rohrgewinde aussen / Male Ferrule with pipe thread outside
B3.N10.R00	Gewindestutzen mit Rohrgewinde aussen / Thread Ferrule with pipe thread outside
A3.N10.G00	Bundstutzen mit Gewinde innen / Male Ferrule with pipe thread inside
B3.N10.G00	Gewindestutzen mit Gewinde innen / Thread Ferrule with pipe thread inside
H1	Bundendstutzen / Male Solid-end Ferrule
E0	Gewindeendstutzen / Thread Solid-end Ferrule

2. Norm / Standard

D	DIN Abmessung / DIN dimension
N	ISO Abmessung / ISO dimension
K	ODAbmessung / OD dimension
E	SMS Abmessung / SMS dimension

2.1 Nennweite / Nominal Size

(siehe Rohranschluss-Tabelle 002 /
see table of pipe connections 002)

00	Standard Schweissanschluss / Weld End
02	DN02 Nennweite / DN02 Nominal Size
03	DN03 Nennweite / DN03 Nominal Size
04	DN04 Nennweite / DN04 Nominal Size
05	DN05 Nennweite / DN05 Nominal Size
06	DN06 Nennweite / DN06 Nominal Size
07	DN07 Nennweite / DN07 Nominal Size
08	DN08 Nennweite / DN08 Nominal Size
10	DN10 Nennweite / DN10 Nominal Size
15	DN15 Nennweite / DN15 Nominal Size
20	DN20 Nennweite / DN20 Nominal Size
25	DN25 Nennweite / DN25 Nominal Size
32	DN32 Nennweite / DN32 Nominal Size
40	DN40 Nennweite / DN40 Nominal Size

3. Material / Material

04	1.4404 (316L)
35	1.4435 BN2
39	1.4539
22	2.4602 (Hastelloy C22)
05	1.4305
01	1.4301
A2	A2 – Befestigungs- & Sicherungselemente / A2 – Mounting & Retaining Parts

4. Dichtungsmaterial / Seal Material

0	EPDM (Standardausrüstung für Baugruppen / Standard for Assemblies)
1	Silikon / Silicone
2	FKM (Viton)
3	FEP / Sil (Silikon-Kern / Silicone core)
4	PEEK
5	FFKM (Kalrez)
6	PTFE rein / PTFE pure
7	FEP / EPDM (EPDM-Kern / EPDM core)
8	FEP / FKM (FKM-Kern / FKM core)

5. Oberfläche / Surface

C	Innenoberfläche Ra<0.6; elektropoliert / Internal Surface Ra<0.6; electropolished
E	Innenoberfläche Ra<0.4; elektropoliert / Internal Surface Ra<0.4; electropolished

weitere Oberflächen auf Anfrage / other surfaces on request

bio-plus® Komplettbaugruppe

bio-plus® Complete Assembly

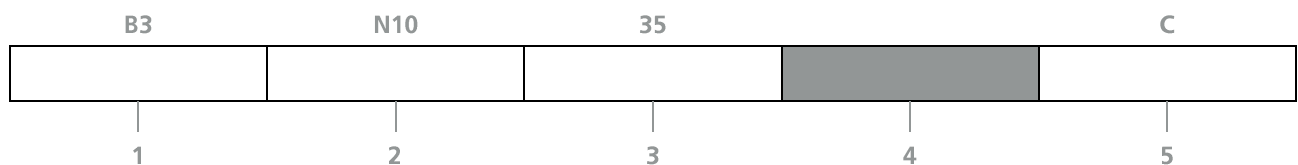
Bestellbeispiel / Ordering example: **AD.N10.35.0.C**



bio-plus® Einzelteil

bio-plus® Single Component

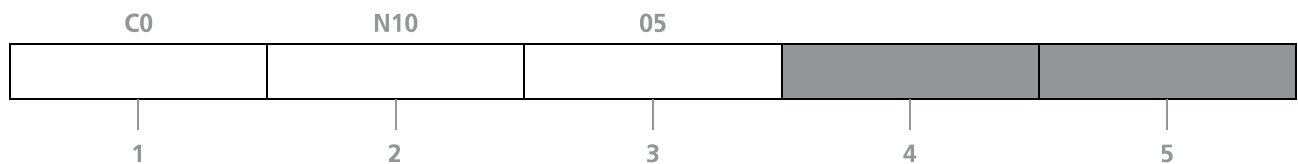
Bestellbeispiel / Ordering example: **B3.N10.35.C**



bio-plus® Mutter

bio-plus® Groove Nut

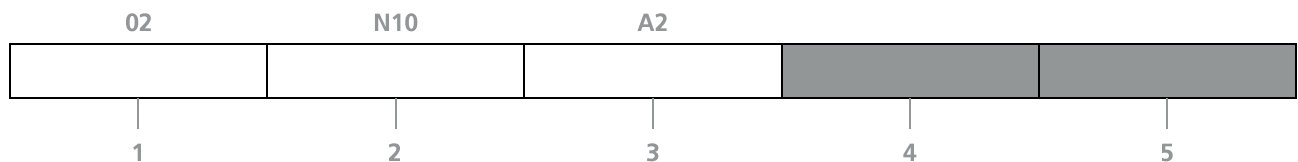
Bestellbeispiel / Ordering example: **C0.N10.05**



Sicherungsringe

Retaining Ring

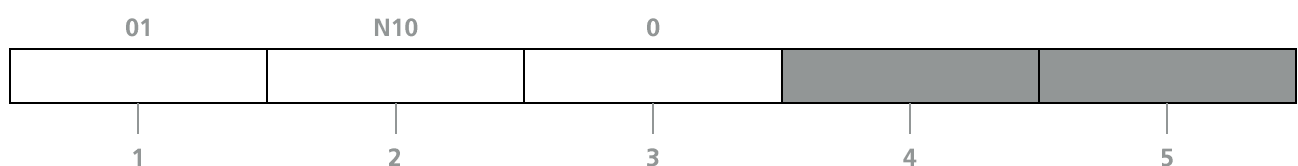
Bestellbeispiel / Ordering example: **02.N10.A2**



bio-plus® O-Ring

bio-plus® O-Ring

Bestellbeispiel / Ordering example: **01.N10.0**

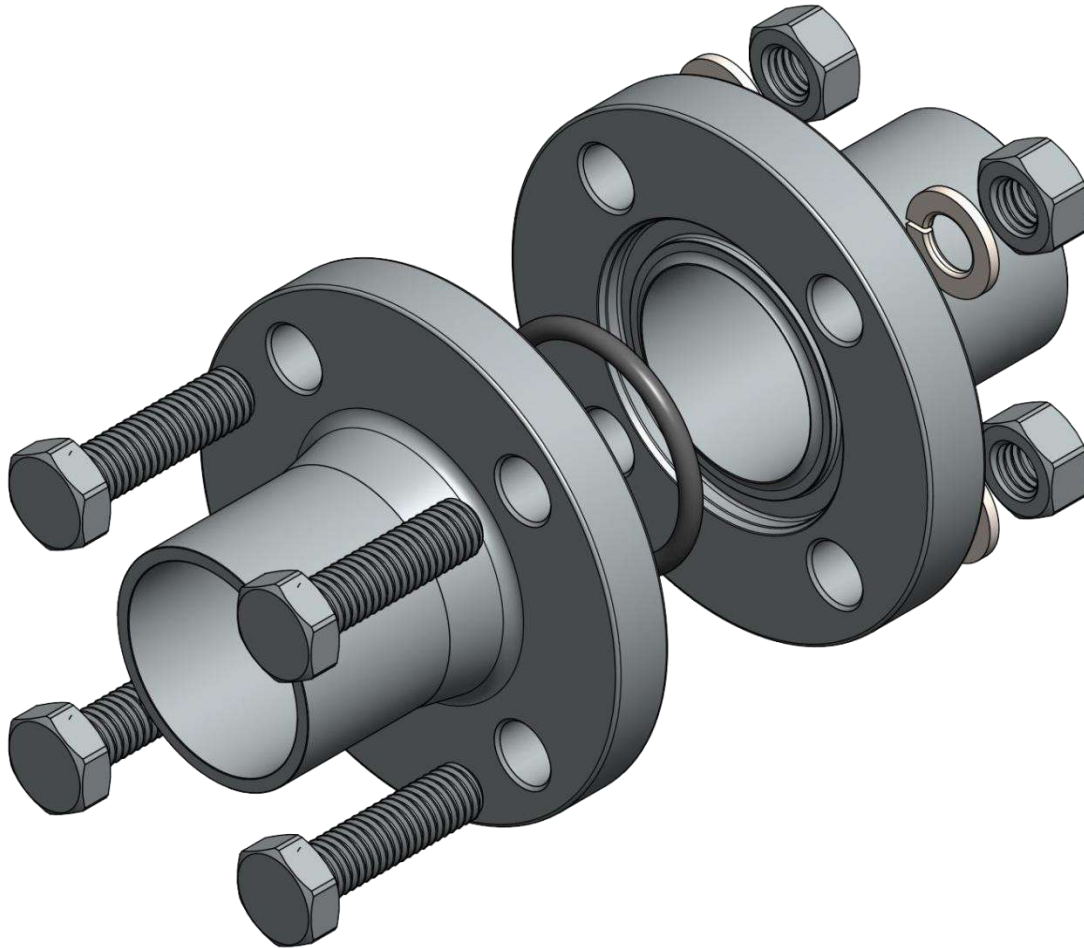


2.11 Rohranschluss-Tabelle 002

Table of Pipe Connections 002

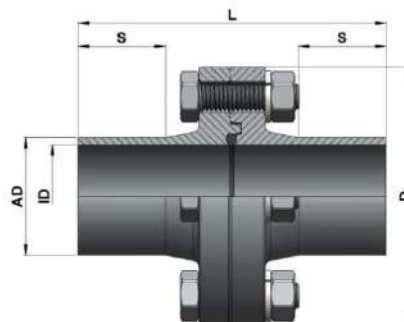
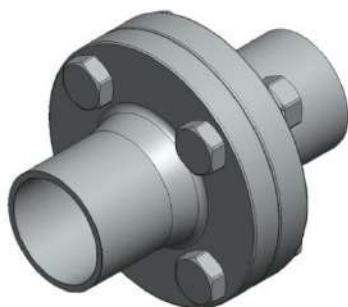
Nennweite Nominal Size	DIN 11866			SMS SMS	Rohrgewinde Aussen konisch nach ISO 7-1 Pipe thread outside tapered acc. ISO 7-1	Rohrgewinde Innen zylindrisch nach ISO 228-1 Pipe thread inside cylindrical acc. ISO 228-1
	Reihe A (DIN) Series A (DIN)	Reihe B (ISO) Series B (ISO)	Reihe C (OD) Series C (OD)			
02			Ø6.35x0.89		R $\frac{1}{4}$ "	G $\frac{1}{4}$ "
03			Ø9.53x0.89		R $\frac{3}{8}$ "	G $\frac{3}{8}$ "
04	Ø6.00x1.00					
05			Ø12.70x1.65		R $\frac{1}{2}$ "	G $\frac{1}{2}$ "
06	Ø8.00x1.00	Ø10.20x1.60		Ø8.00x1.00		
07			Ø19.05x1.65		R $\frac{3}{4}$ "	G $\frac{3}{4}$ "
08	Ø10.00x1.00	Ø13.50x1.60		Ø10.00x1.00		
10	Ø13.00x1.50	Ø17.20x1.60	Ø25.40x1.65	Ø12.00x1.00	R1"	G1"
15	Ø19.00x1.50	Ø21.30x1.60	Ø38.10x1.65	Ø18.00x1.00	R1 $\frac{1}{2}$ "	G1 $\frac{1}{2}$ "
20	Ø23.00x1.50	Ø26.90x1.60	Ø50.80x1.65	Ø22.00x1.00	R2"	G2"
25	Ø29.00x1.50	Ø33.70x2.00	Ø63.50x1.65	Ø25.00x1.20	R2 $\frac{1}{2}$ "	G2 $\frac{1}{2}$ "
30					R3"	G3"
32	Ø35.00x1.50	Ø42.40x2.00		Ø32.00x1.20		
40	Ø41.00x1.50	Ø48.30x2.00		Ø38.00x1.20		

3 **bio-plus® Steril Flanschverbindung** bio-plus® Sterile Flange Connection



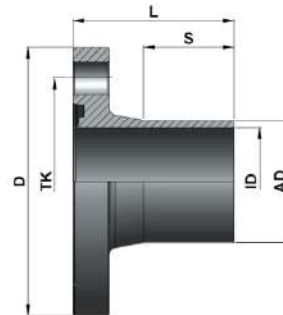
3.1 bio-plus® Flanschverbindung komplett EPDM

bio-plus® Flange Connection complete EPDM



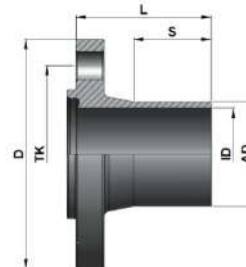
	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN10	AD.F10.35.0.C	12.00	10.00	78.00	20.00	54.00			0.34
	DIN15	AD.F15.35.0.C	19.00	16.00	78.00	20.00	59.00			0.40
	DIN20	AD.F20.35.0.C	23.00	20.00	78.00	20.00	64.00			0.47
	DIN25	AD.F25.35.0.C	29.00	26.00	78.00	20.00	70.00			0.55
	DIN32	AD.F32.35.0.C	35.00	32.00	88.00	25.00	76.00			0.64
	DIN40	AD.F40.35.0.C	41.00	38.00	88.00	25.00	82.00			0.72
	DIN50	AD.F50.35.0.C	53.00	50.00	88.00	25.00	94.00			0.88
	DIN65	AD.F65.35.0.C	70.00	66.00	88.00	25.00	113.00			1.20
	DIN80	AD.F80.35.0.C	85.00	81.00	112.00	30.00	133.00			2.02
	DIN100	AD.F100.35.0.C	104.00	100.00	115.00	30.00	159.00			3.05
ISO Abmessung ISO Dimension	ISO08	AD.Z08.35.0.C	13.50	10.30	78.00	20.00	54.00			0.34
	ISO10	AD.Z10.35.0.C	17.20	14.00	78.00	20.00	59.00			0.40
	ISO15	AD.Z15.35.0.C	21.30	18.10	78.00	20.00	62.00			0.45
	ISO20	AD.Z20.35.0.C	26.90	23.70	78.00	20.00	69.00			0.54
	ISO25	AD.Z25.35.0.C	33.70	29.70	88.00	25.00	74.00			0.64
	ISO32	AD.Z32.35.0.C	42.40	38.40	88.00	25.00	82.00			0.75
	ISO40	AD.Z40.35.0.C	48.30	44.30	88.00	25.00	88.00			0.83
	ISO50	AD.Z50.35.0.C	60.30	56.30	88.00	25.00	103.00			1.08
	ISO65	AD.Z65.35.0.C	76.10	72.10	95.00	30.00	125.00			1.71
	ISO80	AD.Z80.35.0.C	88.90	84.30	112.00	30.00	137.00			2.18
	ISO100	AD.Z100.35.0.C	114.30	109.70	114.00	30.00	168.00			3.26
OD Abmessung OD Dimension	OD½"	AD.M05.35.0.C	12.70	9.40	78.00	20.00	54.00			0.34
	OD¾"	AD.M07.35.0.C	19.05	15.75	78.00	20.00	59.00			0.41
	OD1"	AD.M10.35.0.C	25.40	22.10	78.00	20.00	66.00			0.50
	OD1½"	AD.M15.35.0.C	38.10	34.80	88.00	25.00	79.00			0.69
	OD2"	AD.M20.35.0.C	50.80	47.50	88.00	25.00	92.00			0.87
	OD2½"	AD.M25.35.0.C	63.50	60.20	88.00	25.00	107.00			1.07
	OD3"	AD.M30.35.0.C	76.20	72.90	95.00	25.00	125.00			1.66
	OD4"	AD.M40.35.0.C	101.60	97.38	115.00	30.00	157.00			3.09
	OD6"	AD.M60.35.0.C	152.40	146.86	135.00	38.00	213.00			5.81
	OD8"	AD.M80.35.0.C	203.20	197.60	141.00	38.00	280.00			10.64
SMS Abmessung SMS Dimension	SMS10	AD.B10.35.0.C	12.00	10.00	78.00	20.00	54.00			0.33
	SMS15	AD.B15.35.0.C	18.00	16.00	78.00	20.00	59.00			0.39
	SMS20	AD.B20.35.0.C	22.00	20.00	78.00	20.00	64.00			0.45
	SMS25	AD.B25.35.0.C	25.00	22.60	78.00	20.00	69.00			0.53
	SMS32	AD.B32.35.0.C	32.00	29.60	88.00	25.00	74.00			0.59
	SMS40	AD.B40.35.0.C	38.00	35.60	88.00	25.00	79.00			0.65
	SMS50	AD.B50.35.0.C	51.00	48.60	88.00	25.00	92.00			0.82
	SMS65	AD.B65.35.0.C	63.50	60.20	88.00	25.00	107.00			1.07
	SMS80	AD.B80.35.0.C	76.10	72.90	95.00	26.00	125.00			1.65
	SMS100	AD.B100.35.0.C	101.60	97.60	115.00	30.00	157.00			3.05

3.2 bio-plus® Nutflansch bio-plus® Female Flange



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]	TK [mm]		Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN10	B3.F10.35.C	12.00	10.00	39.50	20.00	54.00	37.00		0.16
	DIN10	B3.F10.35.C	13.00	10.00	39.50	20.00	54.00	37.00		0.17
	DIN15	B3.F15.35.C	19.00	16.00	39.50	20.00	59.00	45.00		0.20
	DIN20	B3.F20.35.C	23.00	20.00	39.50	20.00	64.00	47.00		0.23
	DIN25	B3.F25.35.C	29.00	26.00	39.50	20.00	70.00	53.00		0.27
	DIN32	B3.F32.35.C	35.00	32.00	44.50	25.00	76.00	59.00		0.31
	DIN40	B3.F40.35.C	41.00	38.00	44.50	25.00	82.00	65.00		0.35
	DIN50	B3.F50.35.C	53.00	50.00	44.50	25.00	94.00	77.00		0.43
	DIN65	B3.F65.35.C	70.00	66.00	44.50	25.00	113.00	95.00		0.59
	DIN80	B3.F80.35.C	85.00	81.00	56.00	30.00	133.00	112.00		0.96
	DIN100	B3.F100.35.C	104.00	100.00	58.00	30.00	159.00	137.00		1.51
ISO Abmessung ISO Dimension	ISO08	B3.Z08.35.C	13.50	10.30	39.50	20.00	54.00	37.00		0.17
	ISO10	B3.Z10.35.C	17.20	14.00	39.50	20.00	59.00	42.00		0.20
	ISO15	B3.Z15.35.C	21.30	18.10	39.50	20.00	62.00	45.00		0.22
	ISO20	B3.Z20.35.C	26.90	23.70	39.50	20.00	69.00	52.00		0.27
	ISO25	B3.Z25.35.C	33.70	29.70	44.50	25.00	74.00	57.00		0.32
	ISO32	B3.Z32.35.C	42.40	38.40	44.50	25.00	82.00	65.00		0.37
	ISO40	B3.Z40.35.C	48.30	44.30	44.50	25.00	88.00	71.00		0.41
	ISO50	B3.Z50.35.C	60.30	56.30	44.50	25.00	103.00	85.00		0.54
	ISO65	B3.Z65.35.C	76.10	72.10	48.00	25.00	125.00	104.00		0.84
	ISO80	B3.Z80.35.C	88.90	84.30	56.00	30.00	137.00	116.00		1.04
	ISO100	B3.Z100.35.C	114.30	109.70	58.00	30.00	168.00	146.00		1.63
OD Abmessung OD Dimension	OD½"	B3.M05.35.C	12.70	9.40	39.50	20.00	54.00	37.00		0.17
	OD¾"	B3.M07.35.C	19.05	15.75	39.50	20.00	59.00	42.00		0.20
	OD1"	B3.M10.35.C	25.40	22.10	39.50	20.00	66.00	49.00		0.25
	OD1½"	B3.M15.35.C	38.10	34.80	44.50	25.00	79.00	62.00		0.34
	OD2"	B3.M20.35.C	50.80	47.50	44.50	25.00	92.00	75.00		0.43
	OD2½"	B3.M25.35.C	63.50	60.20	44.50	25.00	107.00	89.00		0.53
	OD3"	B3.M30.35.C	76.20	72.90	48.00	25.00	125.00	104.00		0.81
	OD4"	B3.M40.35.C	101.60	97.38	58.00	30.00	157.00	135.00		1.53
	OD6"	B3.M60.35.C	152.40	146.86	67.50	38.00	213.00	188.00		2.81
	OD8"	B3.M80.35.C	203.20	197.60	70.50	38.00	280.00	250.00		5.12
SMS Abmessung SMS Dimension	SMS10	B3.ß10.35.C	12.00	10.00	39.50	20.00	54.00	37.00		0.16
	SMS15	B3.ß15.35.C	18.00	16.00	39.50	20.00	59.00	42.00		0.19
	SMS20	B3.ß20.35.C	22.00	20.00	39.50	20.00	64.00	47.00		0.22
	SMS25	B3.ß25.35.C	25.00	22.60	39.50	20.00	69.00	52.00		0.26
	SMS32	B3.ß32.35.C	32.00	29.60	44.50	25.00	74.00	57.00		0.29
	SMS40	B3.ß40.35.C	38.00	35.60	44.50	25.00	79.00	62.00		0.32
	SMS50	B3.ß50.35.C	51.00	48.60	44.50	25.00	92.00	75.00		0.40
	SMS65	B3.ß65.35.C	63.50	60.20	44.50	25.00	107.00	89.00		0.53
	SMS80	B3.ß80.35.C	76.10	72.90	48.00	26.00	125.00	104.00		0.81
	SMS100	B3.ß100.35.C	101.60	97.60	58.00	30.00	157.00	135.00		1.52

3.3 bio-plus® Bundflansch bio-plus® Male Flange



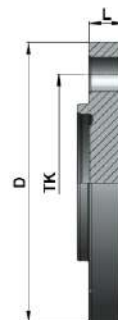
	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]	TK [mm]		Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN10	A3.F10.35.C	12.00	10.00	38.50	20.00	54.00	37.00		0.16
	DIN10	A3.F10.35.C	13.00	10.00	38.50	20.00	54.00	37.00		0.16
	DIN15	A3.F15.35.C	19.00	16.00	38.50	20.00	59.00	45.00		0.19
	DIN20	A3.F20.35.C	23.00	20.00	38.50	20.00	64.00	47.00		0.23
	DIN25	A3.F25.35.C	29.00	26.00	38.50	20.00	70.00	53.00		0.26
	DIN32	A3.F32.35.C	35.00	32.00	43.50	25.00	76.00	59.00		0.31
	DIN40	A3.F40.35.C	41.00	38.00	43.50	25.00	82.00	65.00		0.35
	DIN50	A3.F50.35.C	53.00	50.00	43.50	25.00	94.00	77.00		0.43
	DIN65	A3.F65.35.C	70.00	66.00	43.50	25.00	113.00	95.00		0.58
	DIN80	A3.F80.35.C	85.00	81.00	56.00	30.00	133.00	112.00		1.01
	DIN100	A3.F100.35.C	104.00	100.00	57.00	30.00	159.00	137.00		1.48
ISO Abmessung ISO Dimension	ISO08	A3.Z08.35.C	13.50	10.30	38.50	20.00	54.00	37.00		0.16
	ISO10	A3.Z10.35.C	17.20	14.00	38.50	20.00	59.00	42.00		0.16
	ISO15	A3.Z15.35.C	21.30	18.10	38.50	20.00	62.00	45.00		0.21
	ISO20	A3.Z20.35.C	26.90	23.70	38.50	20.00	69.00	52.00		0.26
	ISO25	A3.Z25.35.C	33.70	29.70	43.50	25.00	74.00	57.00		0.31
	ISO32	A3.Z32.35.C	42.40	38.40	43.50	25.00	82.00	65.00		0.37
	ISO40	A3.Z40.35.C	48.30	44.30	43.50	25.00	88.00	71.00		0.41
	ISO50	A3.Z50.35.C	60.30	56.30	43.50	25.00	103.00	85.00		0.53
	ISO65	A3.Z65.35.C	76.10	72.10	47.00	25.00	125.00	104.00		0.82
	ISO80	A3.Z80.35.C	88.90	84.30	56.00	30.00	137.00	116.00		1.10
	ISO100	A3.Z100.35.C	114.30	109.70	56.00	30.00	168.00	146.00		1.58
OD Abmessung OD Dimension	OD1½"	A3.M05.35.C	12.70	9.40	38.50	20.00	54.00	37.00		0.16
	OD¾"	A3.M07.35.C	19.05	15.75	38.50	20.00	59.00	42.00		0.19
	OD1"	A3.M10.35.C	25.40	22.10	38.50	20.00	66.00	49.00		0.24
	OD1½"	A3.M15.35.C	38.10	34.80	43.50	25.00	79.00	62.00		0.33
	OD2"	A3.M20.35.C	50.80	47.50	43.50	25.00	92.00	75.00		0.42
	OD2½"	A3.M25.35.C	63.50	60.20	43.50	25.00	107.00	89.00		0.52
	OD3"	A3.M30.35.C	76.20	72.90	47.00	25.00	125.00	104.00		0.80
	OD4"	A3.M40.35.C	101.60	97.38	57.00	30.00	157.00	135.00		1.50
	OD6"	A3.M60.35.C	152.40	146.86	71.50	38.00	213.00	188.00		2.91
	OD8"	A3.M80.35.C	203.30	197.60	76.50	38.00	280.00	250.00		5.32
SMS Abmessung SMS Dimension	SMS10	A3.ß10.35.C	12.00	10.00	38.50	20.00	54.00	37.00		0.16
	SMS15	A3.ß15.35.C	18.00	16.00	38.50	20.00	59.00	42.00		0.19
	SMS20	A3.ß20.35.C	22.00	20.00	38.50	20.00	64.00	47.00		0.22
	SMS25	A3.ß25.35.C	25.00	22.60	38.50	20.00	69.00	52.00		0.25
	SMS32	A3.ß32.35.C	32.00	29.60	43.50	25.00	74.00	57.00		0.29
	SMS40	A3.ß40.35.C	38.00	35.60	43.50	25.00	79.00	62.00		0.32
	SMS50	A3.ß50.35.C	51.00	48.60	43.50	25.00	92.00	75.00		0.40
	SMS65	A3.ß65.35.C	63.50	60.20	43.50	25.00	107.00	89.00		0.52
	SMS80	A3.ß80.35.C	76.10	72.90	47.00	26.00	125.00	104.00		0.79
	SMS100	A3.ß100.35.C	101.60	97.60	57.00	30.00	157.00	135.00		1.49

3.4 bio-plus® Nutblindflansch bio-plus® Female Blind Flange



	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]	TK [mm]					Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN10	D3.F10.35.C	54.00	10.00	37.00					0.16
	DIN15	D3.F15.35.C	59.00	10.00	45.00					0.19
	DIN20	D3.F20.35.C	64.00	10.00	47.00					0.22
	DIN25	D3.F25.35.C	70.00	10.00	53.00					0.27
	DIN32	D3.F32.35.C	76.00	10.00	59.00					0.32
	DIN40	D3.F40.35.C	82.00	10.00	65.00					0.38
	DIN50	D3.F50.35.C	94.00	10.00	77.00					0.50
	DIN65	D3.F65.35.C	113.00	10.00	95.00					0.71
	DIN80	D3.F80.35.C	133.00	12.00	112.00					1.17
	DIN100	D3.F100.35.C	159.00	14.00	137.00					2.01
ISO Abmessung ISO Dimension	ISO08	D3.Z08.35.C	54.00	10.00	37.00					0.16
	ISO10	D3.Z10.35.C	59.00	10.00	42.00					0.19
	ISO15	D3.Z15.35.C	62.00	10.00	45.00					0.21
	ISO20	D3.Z20.35.C	69.00	10.00	52.00					0.26
	ISO25	D3.Z25.35.C	74.00	10.00	57.00					0.30
	ISO32	D3.Z32.35.C	82.00	10.00	65.00					0.37
	ISO40	D3.Z40.35.C	88.00	10.00	71.00					0.43
	ISO50	D3.Z50.35.C	103.00	10.00	85.00					0.60
	ISO65	D3.Z65.35.C	125.00	12.00	104.00					0.67
	ISO80	D3.Z80.35.C	137.00	12.00	116.00					1.25
OD Abmessung OD Dimension	ISO100	D3.Z100.35.C	168.00	14.00	146.00					2.25
	OD½"	D3.M05.35.C	54.00	10.00	37.00					0.16
	OD¾"	D3.M07.35.C	59.00	10.00	42.00					0.19
	OD1"	D3.M10.35.C	66.00	10.00	49.00					0.24
	OD1½"	D3.M15.35.C	79.00	10.00	62.00					0.35
	OD2"	D3.M20.35.C	92.00	10.00	75.00					0.48
	OD2½"	D3.M25.35.C	107.00	10.00	89.00					0.63
	OD3"	D3.M30.35.C	125.00	12.00	104.00					1.04
	OD4"	D3.M40.35.C	157.00	14.00	135.00					1.96
	OD6"	D3.M60.35.C	213.00	16.00	188.00					4.17
SMS Abmessung SMS Dimension	OD8"	D3.M80.35.C	280.00	18.50	250.00					8.47
	SMS10	D3.ß10.35.C	54.00	10.00	37.00					0.16
	SMS15	D3.ß15.35.C	59.00	10.00	42.00					0.19
	SMS20	D3.ß20.35.C	64.00	10.00	47.00					0.22
	SMS25	D3.ß25.35.C	69.00	10.00	52.00					0.26
	SMS32	D3.ß32.35.C	74.00	10.00	57.00					0.30
	SMS40	D3.ß40.35.C	79.00	10.00	62.00					0.35
	SMS50	D3.ß50.35.C	92.00	10.00	75.00					0.47
	SMS65	D3.ß65.35.C	107.00	10.00	89.00					0.63
	SMS80	D3.ß80.35.C	125.00	12.00	104.00					1.04
	SMS100	D3.ß100.35.C	157.00	14.00	135.00					1.96

3.5 bio-plus® Bundblindflansch bio-plus® Male Blind Flange



	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]	TK [mm]					Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN10	L3.F10.35.C	54.00	9.00	37.00					0.15
	DIN15	L3.F15.35.C	59.00	9.00	45.00					0.18
	DIN20	L3.F20.35.C	64.00	9.00	47.00					0.22
	DIN25	L3.F25.35.C	70.00	9.00	53.00					0.26
	DIN32	L3.F32.35.C	76.00	9.00	59.00					0.31
	DIN40	L3.F40.35.C	82.00	9.00	65.00					0.37
	DIN50	L3.F50.35.C	94.00	9.00	77.00					0.49
	DIN65	L3.F65.35.C	113.00	9.00	95.00					0.70
	DIN80	L3.F80.35.C	133.00	12.00	112.00					1.26
	DIN100	L3.F100.35.C	159.00	13.00	137.00					1.98
ISO Abmessung ISO Dimension	ISO08	L3.Z08.35.C	54.00	9.00	37.00					0.15
	ISO10	L3.Z10.35.C	59.00	9.00	42.00					0.18
	ISO15	L3.Z15.35.C	62.00	9.00	45.00					0.20
	ISO20	L3.Z20.35.C	69.00	9.00	52.00					0.26
	ISO25	L3.Z25.35.C	74.00	9.00	57.00					0.30
	ISO32	L3.Z32.35.C	82.00	9.00	65.00					0.37
	ISO40	L3.Z40.35.C	88.00	9.00	71.00					0.43
	ISO50	L3.Z50.35.C	103.00	9.00	85.00					0.59
	ISO65	L3.Z65.35.C	125.00	11.00	104.00					1.01
	ISO80	L3.Z80.35.C	137.00	12.00	116.00					1.34
	ISO100	L3.Z100.35.C	168.00	13.00	146.00					2.26
OD Abmessung OD Dimension	OD½"	L3.M05.35.C	54.00	9.00	37.00					0.15
	OD¾"	L3.M07.35.C	59.00	9.00	42.00					0.18
	OD1"	L3.M10.35.C	66.00	9.00	49.00					0.23
	OD1½"	L3.M15.35.C	79.00	9.00	62.00					0.34
	OD2"	L3.M20.35.C	92.00	9.00	75.00					0.47
	OD2½"	L3.M25.35.C	107.00	9.00	89.00					0.62
	OD3"	L3.M30.35.C	125.00	11.00	104.00					1.03
	OD4"	L3.M40.35.C	157.00	13.00	135.00					1.93
	OD6"	L3.M60.35.C	213.00	16.00	188.00					4.28
	OD8"	L3.M80.35.C	280.00	18.50	250.00					8.81
SMS Abmessung SMS Dimension	SMS10	L3.B10.35.C	54.00	9.00	37.00					0.15
	SMS15	L3.B15.35.C	59.00	9.00	42.00					0.18
	SMS20	L3.B20.35.C	64.00	9.00	47.00					0.22
	SMS25	L3.B25.35.C	69.00	9.00	52.00					0.26
	SMS32	L3.B32.35.C	74.00	9.00	57.00					0.30
	SMS40	L3.B40.35.C	79.00	9.00	62.00					0.34
	SMS50	L3.B50.35.C	92.00	9.00	75.00					0.47
	SMS65	L3.B65.35.C	107.00	9.00	89.00					0.62
	SMS80	L3.B80.35.C	125.00	11.00	104.00					1.03
	SMS100	L3.B100.35.C	157.00	13.00	135.00					1.93

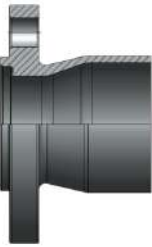
3.6 bio-plus® O-Ring

bio-plus® O-Ring



	Größe Size	Artikel-Nr. EPDM Article-No. EPDM	Artikel-Nr. FEP / Silikon Article-No. FEP (Silicone core)	Artikel-Nr. FKM Article-No. FKM
DIN Abmessung DIN Dimension	DIN10	01.N08.0	01.N08.3	01.N08.2
	DIN15	01.K07.0	01.K07.3	01.K07.2
	DIN20	01.D20.0	01.D20.3	01.D20.2
	DIN25	01.D25.0	01.D25.3	01.D25.2
	DIN32	01.D32.0	01.D32.3	01.D32.2
	DIN40	01.D40.0	01.D40.3	01.D40.2
	DIN50	01.D50.0	01.D50.3	01.D50.2
	DIN65	01.D65.0	01.D65.3	01.D65.2
	DIN80	01.D80.0	01.D80.3	01.D80.2
	DIN100	01.D100.0	01.D100.3	01.D100.2
ISO Abmessung ISO Dimension	ISO08	01.N08.0	01.N08.3	01.N08.2
	ISO10	01.N10.0	01.N10.3	01.N10.2
	ISO15	01.N15.0	01.N15.3	01.N15.2
	ISO20	01.N20.0	01.N20.3	01.N20.2
	ISO25	01.N25.0	01.N25.3	01.N25.2
	ISO32	01.N32.0	01.N32.3	01.N32.2
	ISO40	01.N40.0	01.N40.3	01.N40.2
	ISO50	01.N50.0	01.N50.3	01.N50.2
	ISO65	01.N65.0	01.N65.3	01.N65.2
	ISO80	01.N80.0	01.N80.3	01.N80.2
	ISO100	01.N100.0	01.N100.3	01.N100.2
OD Abmessung OD Dimension	OD½"	01.K05.0	01.K05.3	01.K05.2
	OD¾"	01.K07.0	01.K07.3	01.K07.2
	OD1"	01.K10.0	01.K10.3	01.K10.2
	OD1½"	01.K15.0	01.K15.3	01.K15.2
	OD2"	01.K20.0	01.K20.3	01.K20.2
	OD2½"	01.K25.0	01.K25.3	01.K25.2
	OD3"	01.K30.0	01.K30.3	01.K30.2
	OD4"	01.K40.0	01.K40.3	01.K40.2
	OD6"	01.K60.0	01.K60.3	01.K60.2
	OD8"	01.K80.0	01.K80.3	01.K80.2
SMS Abmessung SMS Dimension	SMS10	01.N08.0	01.N08.3	01.N08.2
	SMS15	01.K07.0	01.K07.3	01.K07.2
	SMS20	01.D20.0	01.D20.3	01.D20.2
	SMS25	01.K10.0	01.K10.3	01.K10.2
	SMS32	01.N25.0	01.N25.3	01.N25.2
	SMS40	01.E40.0	01.E40.3	01.E40.2
	SMS50	01.D50.0	01.D50.3	01.D50.2
	SMS65	01.K25.0	01.K25.3	01.K25.2
	SMS80	01.N65.0	01.N65.3	01.N65.2
	SMS100	01.K40.0	01.K40.3	01.K40.2

3.7 bio-plus® erweitertes Produktsortiment bio-plus® extended Product Range

			
K0	Bundflansch Reduktion	L0	Bundflansch Erweiterung
	Male Flange Reduction		Male Flange Enlar- gement

			
I0	Nutflansch Reduktion	M0	Nutflansch Erweiterung
	Female Flange Reduction		Female Flange Enlargement

			
E0	Bundflansch- Endstutzen	H1	Nutflansch- Endstutzen
	Male Solid-end Flange		Female Solid-end Flange

3.8 Bestellschlüssel Ordering Key

1. Artikel / Article

AD	Flanschverbindung kompl. / Flange Connection compl.
A3	Bundflansch / Male Flange
B3	Nutflansch / Female Flange
L3	Bund-Blindflansch / Male Blind Flange
D3	Nut-Blindflansch / Female Blind Flange
01	O-Ring Materialspezifikation / O-Ring Material Specification
weitere Ausführungen / further execution	
K0	Bundflansch Reduktion / Male Flange Reduction
I0	Nutflansch Reduktion / Female Flange Reduction
L0	Bundflansch Erweiterung / Male Flange Enlargement
M0	Nutflansch Erweiterung / Female Flange Enlargement
E0	Bundflansch Endstutzen / Male Solid-end Flange
H0	Nutflansch Endstutzen / Female Solid-end Flange

2. Norm / Standard

F	DIN Abmessung / DIN dimension
Z	ISO Abmessung / ISO dimension
M	OD Abmessung / OD dimension
ß	SMS Abmessung / SMS dimension

2.1 Nennweite / Nominal Size (siehe Rohranschluss-Tabelle 003 / see table of pipe connections 003)

05	DN05 Nennweite / DN05 Nominal Size
07	DN07 Nennweite / DN07 Nominal Size
08	DN08 Nennweite / DN08 Nominal Size
10	DN10 Nennweite / DN10 Nominal Size
15	DN15 Nennweite / DN15 Nominal Size
20	DN20 Nennweite / DN20 Nominal Size
25	DN25 Nennweite / DN25 Nominal Size
30	DN30 Nennweite / DN30 Nominal Size
32	DN32 Nennweite / DN32 Nominal Size
40	DN40 Nennweite / DN40 Nominal Size
50	DN50 Nennweite / DN50 Nominal Size
65	DN65 Nennweite / DN65 Nominal Size
80	DN80 Nennweite / DN80 Nominal Size
100	DN100 Nennweite / DN100 Nominal Size

3. Material / Material

04	1.4404 (316L)
35	1.4435 BN2
39	1.4539
22	2.4602 (Hastelloy C22)
A2	A2 – Befestigungs- & Sicherungselemente / A2 – Mounting & Retaining Parts

4. Dichtungsmaterial / Seal Material

0	EPDM (Standardausrüstung für Baugruppen / Standard for Assemblies)
1	Silikon / Silicone
2	FKM (Viton)
3	FEP / Sil (Silikon-Kern / Silicone core)
4	PEEK
5	FFKM (Kalrez)
6	PTFE rein / PTFE pure
7	FEP / EPDM (EPDM-Kern / EPDM core)
8	FEP / FKM (FKM-Kern / FKM core)

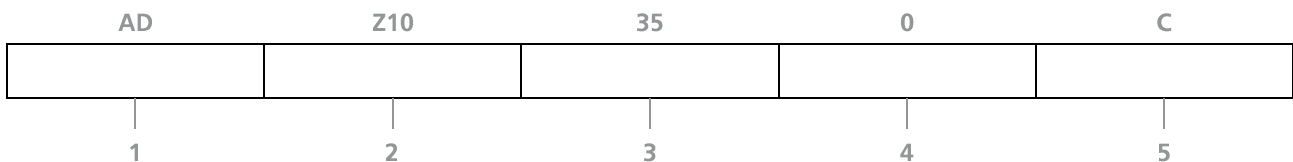
5. Oberfläche / Surface

C	Innenoberfläche Ra<0.6; elektropoliert / Internal Surface Ra<0.6; electropolished
E	Innenoberfläche Ra<0.4; elektropoliert / Internal Surface Ra<0.4; electropolished

weitere Oberflächen auf Anfrage / other surfaces on request

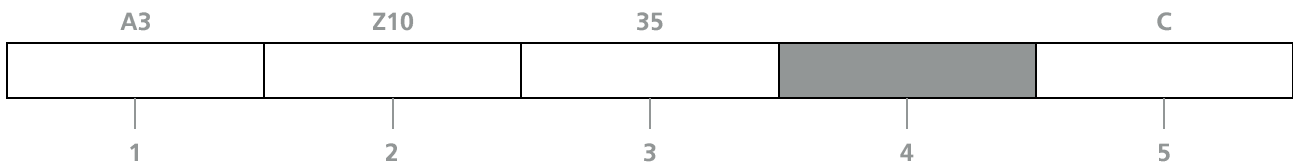
bio-plus® Komplettbaugruppe bio-plus® Complete Assembly

Bestellbeispiel / Ordering example: **AD.Z10.35.0.C**



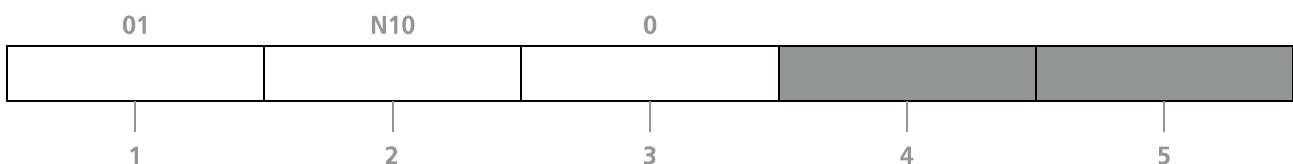
bio-plus® Einzelteil bio-plus® Single Component

Bestellbeispiel / Ordering example: **A3.Z10.35.C**



bio-plus® O-Ring bio-plus® O-Ring

Bestellbeispiel / Ordering example: **01.N10.0**

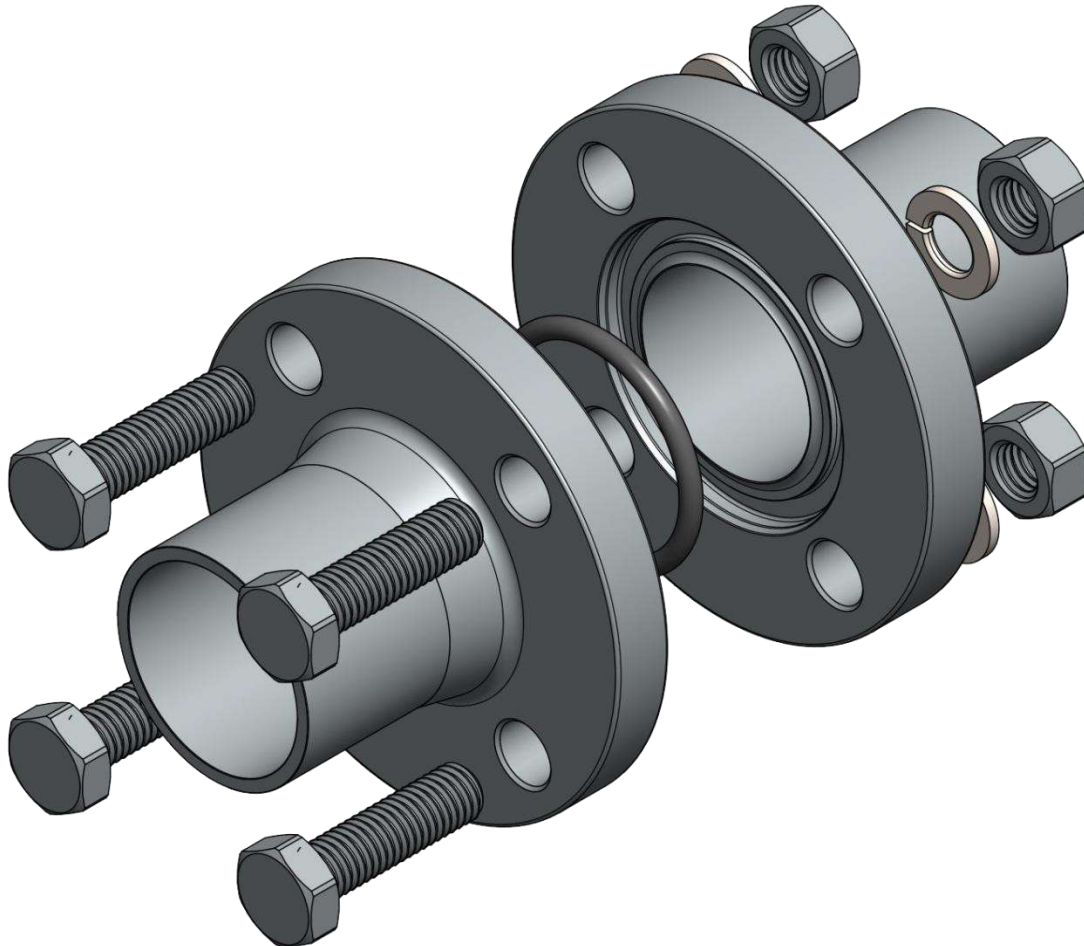


3.9 Rohranschluss-Tabelle 003

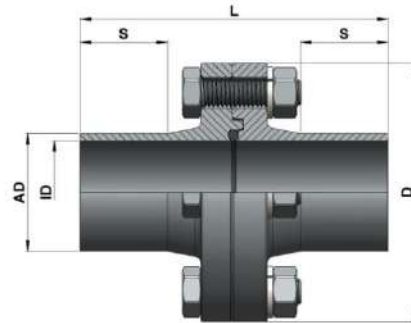
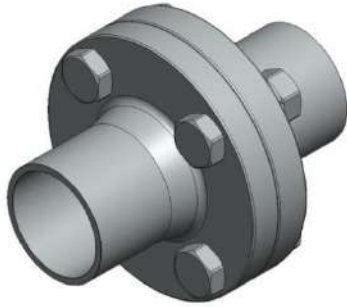
Table of Pipe Connections 003

Nennweite Nominal Size	DIN 11866			SMS SMS
	Reihe A (DIN) Series A (DIN)	Reihe B (ISO) Series B (ISO)	Reihe C (OD) Series C (OD)	
02			Ø6.35x0.89	
03			Ø9.53x0.89	
04	Ø6.00x1.00			
05			Ø12.70x1.65	
06	Ø8.00x1.00	Ø10.20x1.60		Ø8.00x1.00
07			Ø19.05x1.65	
08	Ø10.00x1.00	Ø13.50x1.60		Ø10.00x1.00
10	Ø13.00x1.50	Ø17.20x1.60	Ø25.40x1.65	Ø12.00x1.00
15	Ø19.00x1.50	Ø21.30x1.60	Ø38.10x1.65	Ø18.00x1.00
20	Ø23.00x1.50	Ø26.90x1.60	Ø50.80x1.65	Ø22.00x1.00
25	Ø29.00x1.50	Ø33.70x2.00	Ø63.50x1.65	Ø25.00x1.20
30			Ø76.20x1.65	
32	Ø35.00x1.50	Ø42.40x2.00		Ø32.00x1.20
40	Ø 41.00x1.50	Ø48.30x2.00	Ø101.60x2.11	Ø38.00x1.20
50	Ø 53.00x1.50	Ø60.30x2.00		Ø51.00x1.20
65	Ø 70.00x2.00	Ø76.10x2.00		Ø63.50x1.60
80	Ø 85.00x2.00	Ø88.90x2.30		Ø76.10x1.60
100	Ø 104.00x2.00	Ø114.30x2.30		Ø101.60x2.00

4 **bio-plus® Steril Grossflanschverbindung**
bio-plus® Sterile Large Flange Connection



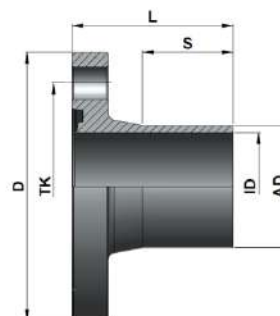
4.1 bio-plus® Gross Flanschverbindung komplett EPDM bio-plus® Large Flange Connection complete EPDM



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN / DIN	DIN125	AA.F125.35.0.C								
	DIN150	AA.F150.35.0.C								
	DIN200	AA.F200.35.0.C								
	DIN250	AA.F250.35.0.C								
	DIN300	AA.F300.35.0.C								
ISO / ISO	ISO125	AA.Z125.35.0.C	139.70	134.50	130.00	30.00	220.00			
	ISO150	AA.Z150.35.0.C	168.00	162.80	130.00	30.00	260.00			
	ISO200	AA.Z200.35.0.C	219.10	213.30	134.00	30.00	300.00			
	ISO250	AA.Z250.35.0.C	273.00	264.20	138.00	30.00	360.00			
	ISO300	AA.Z300.35.0.C	323.90	317.50	142.00	15.00	420.00			
OD / OD	OD6"	AA.M60.35.0.C								
	OD8"	AA.M80.35.0.C								
	OD10"	AA.M100.35.0.C								
	OD12"	AA.M120.35.0.C								

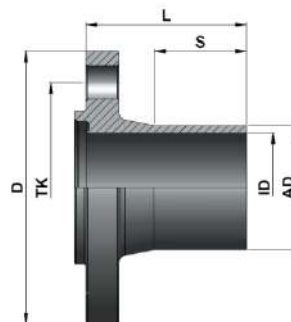
Weitere Nennweiten bis ISO500 auf Anfrage

4.2 bio-plus® Gross - Nutflansch bio-plus® Large Female Flange



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN / DIN	DIN125	B0.F125.35.0.C								
	DIN150	B0.F150.35.0.C								
	DIN200	B0.F200.35.0.C								
	DIN250	B0.F250.35.0.C								
	DIN300	B0.F300.35.0.C								
ISO / ISO	ISO125	B0.Z125.35.0.C	139.70	134.50	66.00	30.00	220.00			
	ISO150	B0.Z150.35.0.C	168.00	162.80	66.00	30.00	260.00			
	ISO200	B0.Z200.35.0.C	219.10	213.30	68.00	30.00	300.00			
	ISO250	B0.Z250.35.0.C	273.00	264.20	70.00	30.00	360.00			
	ISO300	B0.Z300.35.0.C	323.90	317.50	72.00	15.00	420.00			
OD / OD	OD6"	B0.M60.35.0.C								
	OD8"	B0.M80.35.0.C								
	OD10"	B0.M100.35.0.C								
	OD12"	B0.M120.35.0.C								

4.3 bio-plus® Gross-Bundflansch bio-plus® Large Male Flange



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN / DIN	DIN125	A0.F125.35.0.C								
	DIN150	A0.F150.35.0.C								
	DIN200	A0.F200.35.0.C								
	DIN250	A0.F250.35.0.C								
	DIN300	A0.F300.35.0.C								
ISO / ISO	ISO125	A0.Z125.35.0.C	139.70	134.50	64.00	30.00	220.00			
	ISO150	A0.Z150.35.0.C	168.00	162.80	64.00	30.00	260.00			
	ISO200	A0.Z200.35.0.C	219.10	213.30	66.00	30.00	300.00			
	ISO250	A0.Z250.35.0.C	273.00	264.20	68.00	30.00	360.00			
	ISO300	A0.Z300.35.0.C	323.90	317.50	70.00	15.00	420.00			
OD / OD	OD6"	A0.M60.35.0.C								
	OD8"	A0.M80.35.0.C								
	OD10"	A0.M100.35.0.C								
	OD12"	A0.M120.35.0.C								

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AUF ANFRAGE

4.4 bio-plus® Gross Nutblindflansch

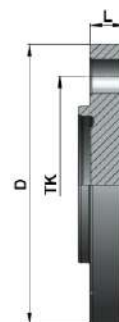
bio-plus® Large Female Blind Flange



	Größe Size	Artikel-Nr. Article-No.			L [mm]	TK [mm]	D [mm]			Gewicht Weight [kg]
DIN / DIN	DIN125	D0.F125.35.0.C								
	DIN150	D0.F150.35.0.C								
	DIN200	D0.F200.35.0.C								
	DIN250	D0.F250.35.0.C								
	DIN300	D0.F300.35.0.C								
ISO / ISO	ISO125	D0.Z125.35.0.C			17.00	180.00	220.00			
	ISO150	D0.Z150.35.0.C			17.00	220.00	260.00			
	ISO200	D0.Z200.35.0.C			19.00	265.00	300.00			
	ISO250	D0.Z250.35.0.C			21.00	315.00	360.00			
	ISO300	D0.Z300.35.0.C			24.00	375.00	420.00			
OD / OD	OD6"	D0.M60.35.0.C								
	OD8"	D0.M80.35.0.C								
	OD10"	D0.M100.35.0.C								
	OD12"	D0.M120.35.0.C								

4.5 bio-plus® Gross Bundblindflansch

bio-plus® Large Male Blind Flange



	Größe Size	Artikel-Nr. Article-No.			L [mm]	TK [mm]	D [mm]			Gewicht Weight [kg]
DIN / DIN	DIN125	L0.F125.35.0.C								
	DIN150	L0.F150.35.0.C								
	DIN200	L0.F200.35.0.C								
	DIN250	L0.F250.35.0.C								
	DIN300	L0.F300.35.0.C								
ISO / ISO	ISO125	L0.Z125.35.0.C			15.00	180.00	220.00			
	ISO150	L0.Z150.35.0.C			15.00	220.00	260.00			
	ISO200	L0.Z200.35.0.C			17.00	265.00	300.00			
	ISO250	L0.Z250.35.0.C			19.00	315.00	360.00			
	ISO300	L0.Z300.35.0.C			22.00	375.00	420.00			
OD / OD	OD6"	L0.M60.35.0.C								
	OD8"	L0.M80.35.0.C								
	OD10"	L0.M100.35.0.C								
	OD12"	L0.M120.35.0.C								

4.6 bio-plus® O-Ring

bio-plus® O-Ring



	Größe Size	Artikel-Nr. EPDM Article-No. EPDM	Artikel-Nr. FEP / Silikon Article-No. FEP (Silicone core)	Artikel-Nr. FKM Article-No. FKM
DIN / DIN	DIN125			
	DIN150			
	DIN200			
	DIN250			
	DIN300			
ISO / ISO	ISO125	01.N125.0	01.N125.3	01.N125.2
	ISO150	01.N150.0	01.N150.3	01.N150.2
	ISO200	01.N200.0	01.N200.3	01.N200.2
	ISO250	01.N250.0	01.N250.3	01.N250.2
	ISO300	01.N300.0	01.N300.3	01.N300.2
OD / OD	OD6"			
	OD8"			
	OD10"			
	OD12"			

4.7 Bestellschlüssel Ordering Key

1. Artikel / Article

AA	Gross Flanschverbindung kompl. / Large Flange Connection compl.
A0	Gross - Bundflansch / Large Male Flange
B0	Gross - Nutflansch / Large Female Flange
L0	Gross Bund-Blindflansch / Large Male Blind Flange
D0	Gross Nut-Blindflansch / Large Female Blind Flange
01	O-Ring Materialspezifikation / O-Ring Material Specification

2. Norm / Standard

F	DIN Abmessung / DIN dimension
Z	ISO Abmessung / ISO dimension
M	OD Abmessung / OD dimension

2.1 Nennweite / Nominal Size

(siehe Rohranschluss-Tabelle 003 /
see table of pipe connections 003)

125	DN125 Nennweite / DN05 Nominal Size
150	DN150 Nennweite / DN07 Nominal Size
200	DN200 Nennweite / DN08 Nominal Size
250	DN250 Nennweite / DN10 Nominal Size
300	DN300 Nennweite / DN15 Nominal Size

3. Material / Material

04	1.4404 (316L)
35	1.4435 BN2
39	1.4539
22	2.4602 (Hastelloy C22)
A2	A2 – Befestigungs- & Sicherungselemente / A2 – Mounting & Retaining Parts

4. Dichtungsmaterial / Seal Material

0	EPDM (Standardausrüstung für Baugruppen / Standard for Assemblies)
1	Silikon / Silicone
2	FKM (Viton)
3	FEP / Sil (Silikon-Kern / Silicone core)
4	PEEK
5	FFKM (Kalrez)
6	PTFE rein / PTFE pure
7	FEP / EPDM (EPDM-Kern / EPDM core)
8	FEP / FKM (FKM-Kern / FKM core)

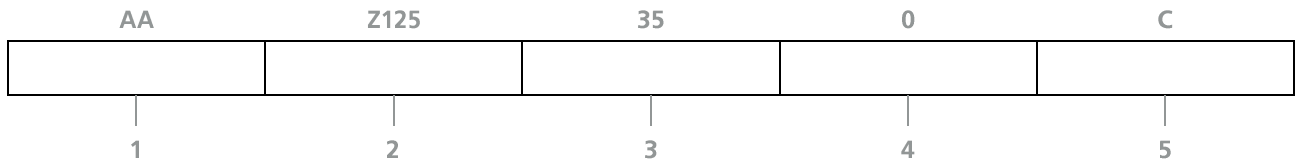
5. Oberfläche / Surface

C	Innenoberfläche Ra<0.6; elektropoliert / Internal Surface Ra<0.6; electropolished
E	Innenoberfläche Ra<0.4; elektropoliert / Internal Surface Ra<0.4; electropolished

weitere Oberflächen auf Anfrage / other surfaces on request

bio-plus® Komplettbaugruppe
bio-plus® Complete Assembly

Bestellbeispiel / Ordering example: AD.Z10.35.0.C



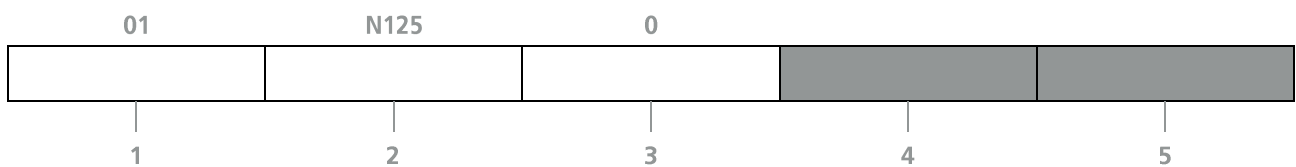
bio-plus® Einzelteil
 bio-plus® Single Component

Bestellbeispiel / Ordering example: A0.Z125.35.C



bio-plus® O-Ring
 bio-plus® O-Ring

Bestellbeispiel / Ordering example: 01.N125.0

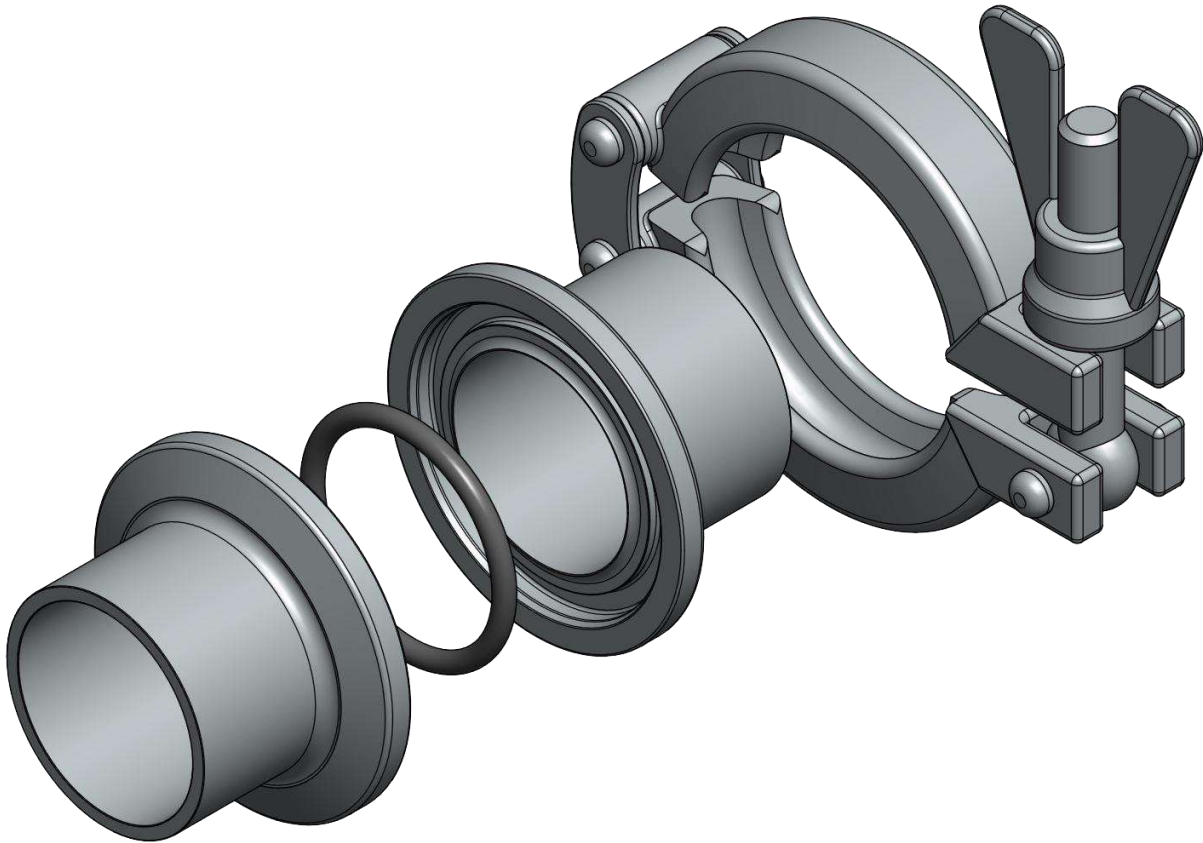


4.8 Rohranschluss-Tabelle 012

Table of Pipe Connections 012

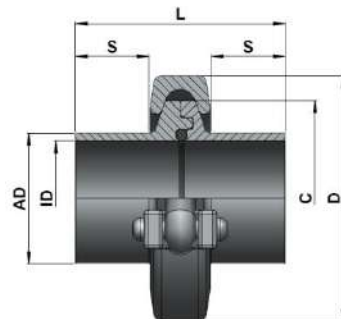
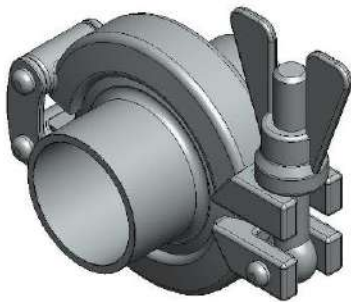
Nennweite	DIN 11866		
	Reihe A (DIN)	Reihe B (ISO)	Reihe C (OD)
60			Ø152.40x2.77
65	Ø 70.00x2.00	Ø76.10x2.00	
80	Ø 85.00x2.00	Ø88.90x2.30	Ø203.20x2.77
100	Ø 104.00x2.00	Ø114.30x2.30	Ø 254.00x2.77
125	Ø 129.00x2.00	Ø139.70x2.60	Ø304.8x2.77 (Code120)
150	Ø 154.00x2.00	Ø168.30x2.6	
200	Ø 204.00x2.00	Ø219.10x2.6	
250		Ø273.10x3.40	
300		Ø323.90x4.00	

5 **bio-plus® Steril Klemmverbindung**
bio-plus® Sterile Clamp Union



5.1 bio-plus® Klemmverbindung komplett EPDM

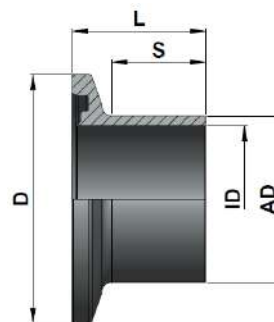
bio-plus® Clamp Union complete EPDM



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]	C [mm]		Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	AA.X04.35.0.C	6.00	4.00	54.00	18.00	38.00	25.00		0.18
	DIN06	AA.X06.35.0.C	8.00	6.00	54.00	18.00	38.00	25.00		0.18
	DIN08	AA.X08.35.0.C	10.00	8.00	54.00	18.00	38.00	25.00		0.18
	DIN10	AA.X10.35.0.C	13.00	10.00	54.00	18.00	64.00	25.00		0.19
	DIN15	AA.X15.35.0.C	19.00	16.00	54.00	18.00	64.00	50.50		0.42
	DIN20	AA.X20.35.0.C	23.00	20.00	54.00	18.00	64.00	50.50		0.41
	DIN25	AA.X25.35.0.C	29.00	26.00	54.00	18.00	64.00	50.50		0.39
	DIN32	AA.X32.35.0.C	35.00	32.00	54.00	18.00	64.00	50.50		0.37
	DIN40	AA.X40.35.0.C	41.00	38.00	60.00	21.00	78.00	64.00		0.52
	DIN50	AA.X50.35.0.C	53.00	50.00	60.00	21.00	92.00	77.50		0.63
	DIN65	AA.X65.35.0.C	70.00	66.00	60.00	21.00	105.00	91.00		0.79
	DIN80	AA.X80.35.0.C	85.00	81.00	60.00	21.00	120.00	106.00		0.90
	DIN100	AA.X100.35.0.C	104.00	100.00	60.00	21.00	144.00	130.00		1.20
ISO Abmessung ISO Dimension	ISO06	AA.U06.35.0.C	10.20	7.00	54.00	18.00	38.00	25.00		0.19
	ISO08	AA.U08.35.0.C	13.50	10.30	54.00	18.00	38.00	25.00		0.19
	ISO10	AA.U10.35.0.C	17.20	14.00	54.00	18.00	64.00	50.50		0.42
	ISO15	AA.U15.35.0.C	21.30	18.10	54.00	18.00	64.00	50.50		0.41
	ISO20	AA.U20.35.0.C	26.90	23.70	54.00	18.00	64.00	50.50		0.40
	ISO25	AA.U25.35.0.C	33.70	29.70	54.00	18.00	64.00	50.50		0.39
	ISO32	AA.U32.35.0.C	42.40	38.40	60.00	21.00	78.00	64.00		0.54
	ISO40	AA.U40.35.0.C	48.30	44.30	60.00	21.00	78.00	64.00		0.51
	ISO50	AA.U50.35.0.C	60.30	56.30	60.00	21.00	92.00	77.50		0.61
	ISO65	AA.U65.35.0.C	76.10	72.10	60.00	21.00	105.00	91.00		0.71
	ISO80	AA.U80.35.0.C	88.90	84.30	60.00	21.00	120.00	106.00		0.89
	ISO100	AA.U100.35.0.C	114.30	109.70	60.00	20.00	158.00	144.50		1.47

	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]	C [mm]		Gewicht Weight [kg]
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	AA.Q02.35.0.C	6.35	4.57	54.00	18.00	38.00	25.00		0.18
	OD $\frac{3}{8}$ "	AA.Q03.35.0.C	9.53	7.75	54.00	18.00	38.00	25.00		0.18
	OD $\frac{1}{2}$ "	AA.Q05.35.0.C	12.70	9.40	54.00	18.00	38.00	25.00		0.19
	OD $\frac{3}{4}$ "	AA.Q07.35.0.C	19.05	15.75	54.00	18.00	64.00	50.50		0.42
	OD1"	AA.Q10.35.0.C	25.40	22.10	54.00	18.00	64.00	50.50		0.41
	OD1 $\frac{1}{2}$ "	AA.Q15.35.0.C	38.10	34.80	54.00	18.00	64.00	50.50		0.36
	OD2"	AA.Q20.35.0.C	50.80	47.50	60.00	21.00	78.00	64.00		0.47
	OD2 $\frac{1}{2}$ "	AA.Q25.35.0.C	63.50	60.20	60.00	21.00	92.00	77.50		0.56
	OD3"	AA.Q30.35.0.C	76.20	72.90	60.00	21.00	105.00	91.00		0.68
	OD4"	AA.Q40.35.0.C	101.60	97.38	60.00	21.00	133.00	119.00		0.98
SMS Abmessung SMS Dimension	SMS06	AA.L06.35.0.C	8.00	6.00	54.00	18.00	38.00	25.00		0.18
	SMS08	AA.L08.35.0.C	10.00	8.00	54.00	18.00	38.00	25.00		0.18
	SMS10	AA.L10.35.0.C	12.00	10.00	54.00	18.00	38.00	25.00		0.18
	SMS15	AA.L15.35.0.C	18.00	16.00	54.00	18.00	64.00	50.50		0.41
	SMS20	AA.L20.35.0.C	22.00	20.00	54.00	18.00	64.00	50.50		0.40
	SMS25	AA.L25.35.0.C	25.00	22.60	54.00	18.00	64.00	50.50		0.39
	SMS32	AA.L32.35.0.C	32.00	29.60	54.00	18.00	64.00	50.50		0.37
	SMS40	AA.L40.35.0.C	38.00	35.60	60.00	21.00	78.00	64.00		0.52
	SMS50	AA.L50.35.0.C	51.00	48.60	60.00	21.00	92.00	77.50		0.63
	SMS65	AA.L65.35.0.C	63.50	60.30	60.00	21.00	92.00	77.50		0.55
	SMS80	AA.L80.35.0.C	76.10	72.90	60.00	20.00	105.00	91.00		0.68
	SMS100	AA.L100.35.0.C	101.60	97.60	60.00	20.00	133.00	119.00		0.96

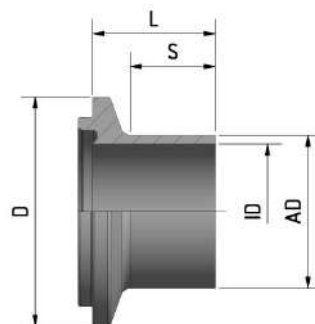
5.2 bio-plus® Nutklemmstutzen bio-plus® Female Clamp



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	B3.X04.35.C	6.00	4.00	27.00	18.00	25.00			0.02
	DIN06	B3.X06.35.C	8.00	6.00	27.00	18.00	25.00			0.02
	DIN08	B3.X08.35.C	10.00	8.00	27.00	18.00	25.00			0.02
	DIN10	B3.X10.35.C	13.00	10.00	27.00	18.00	25.00			0.02
	DIN15	B3.X15.35.C	19.00	16.00	27.00	18.00	50.50			0.09
	DIN20	B3.X20.35.C	23.00	20.00	27.00	18.00	50.50			0.09
	DIN25	B3.X25.35.C	29.00	26.00	27.00	18.00	50.50			0.08
	DIN32	B3.X32.35.C	35.00	32.00	30.00	21.00	64.00			0.06
	DIN40	B3.X40.35.C	41.00	38.00	30.00	21.00	64.00			0.11
	DIN50	B3.X50.35.C	53.00	50.00	30.00	21.00	77.50			0.15
	DIN65	B3.X65.35.C	70.00	66.00	30.00	21.00	91.00			0.19
	DIN80	B3.X80.35.C	85.00	81.00	30.00	20.00	106.00			0.23
	DIN100	B3.X100.35.C	104.00	100.00	30.00	20.00	130.00			0.34
ISO Abmessung ISO Dimension	ISO06	B3.U06.35.C	10.20	7.00	27.00	18.00	25.00			0.02
	ISO08	B3.U08.35.C	13.50	10.30	27.00	18.00	25.00			0.02
	ISO10	B3.U10.35.C	17.20	14.00	27.00	18.00	50.50			0.09
	ISO15	B3.U15.35.C	21.30	18.10	27.00	18.00	50.50			0.09
	ISO20	B3.U20.35.C	26.90	23.70	27.00	18.00	50.50			0.08
	ISO25	B3.U25.35.C	33.70	29.70	27.00	18.00	50.50			0.08
	ISO32	B3.U32.35.C	42.40	38.40	30.00	21.00	64.00			0.13
	ISO40	B3.U40.35.C	48.30	44.30	30.00	21.00	64.00			0.11
	ISO50	B3.U50.35.C	60.30	56.30	30.00	21.00	77.50			0.14
	ISO65	B3.U65.35.C	76.10	72.10	30.00	21.00	91.00			0.15
	ISO80	B3.U80.35.C	88.90	84.30	30.00	21.00	106.00			0.22
	ISO100	B3.U100.35.C	114.30	109.70	30.00	21.00	144.50			0.45

	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	B3.Q02.35.C	6.35	4.57	27.00	18.00	25.00			0.02
	OD $\frac{3}{8}$ "	B3.Q03.35.C	9.53	7.75	27.00	18.00	25.00			0.02
	OD $\frac{1}{2}$ "	B3.Q05.35.C	12.70	9.40	27.00	18.00	25.00			0.02
	OD $\frac{3}{4}$ "	B3.Q07.35.C	19.05	15.75	27.00	18.00	50.50			0.09
	OD1"	B3.Q10.35.C	25.40	22.10	27.00	18.00	50.50			0.08
	OD1 $\frac{1}{2}$ "	B3.Q15.35.C	38.10	34.80	30.00	21.00	50.50			0.06
	OD2"	B3.Q20.35.C	50.80	47.50	30.00	21.00	64.00			0.09
	OD2 $\frac{1}{2}$ "	B3.Q25.35.C	63.50	60.20	30.00	21.00	77.50			0.11
	OD3"	B3.Q30.35.C	76.20	72.90	30.00	21.00	91.00			0.14
	OD4"	B3.Q40.35.C	101.60	97.38	30.00	21.00	119.00			0.24
SMS Abmessung SMS Dimension	SMS06	B3.L06.35.C	8.00	6.00	27.00	18.00	25.00			0.02
	SMS08	B3.L08.35.C	10.00	8.00	27.00	18.00	25.00			0.02
	SMS10	B3.L10.35.C	12.00	10.00	27.00	18.00	25.00			0.02
	SMS15	B3.L15.35.C	18.00	16.00	27.00	18.00	50.50			0.02
	SMS20	B3.L20.35.C	22.00	20.00	27.00	18.00	50.50			0.09
	SMS25	B3.L25.35.C	25.00	22.60	27.00	18.00	50.50			0.08
	SMS32	B3.L32.35.C	32.00	29.60	27.00	18.00	50.50			0.06
	SMS40	B3.L40.35.C	38.00	35.60	30.00	21.00	64.00			0.12
	SMS50	B3.L50.35.C	51.00	48.60	30.00	21.00	77.50			0.15
	SMS65	B3.L65.35.C	63.50	60.30	30.00	21.00	77.50			0.12
	SMS80	B3.L80.35.C	76.10	72.90	30.00	21.00	91.00			0.14
	SMS100	B3.L100.35.C	101.60	97.60	30.00	21.00	119.00			0.23

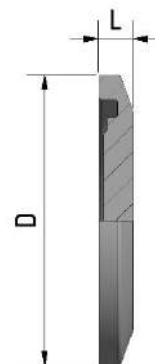
5.3 bio-plus® Bundklemmstutzen bio-plus® Male Clamp



	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	A3.X04.35.C	6.00	4.00	27.00	18.00	25.00			0.02
	DIN06	A3.X06.35.C	8.00	6.00	27.00	18.00	25.00			0.02
	DIN08	A3.X08.35.C	10.00	8.00	27.00	18.00	25.00			0.02
	DIN10	A3.X10.35.C	13.00	10.00	27.00	18.00	25.00			0.03
	DIN15	A3.X15.35.C	19.00	16.00	27.00	18.00	50.50			0.10
	DIN20	A3.X20.35.C	23.00	20.00	27.00	18.00	50.50			0.10
	DIN25	A3.X25.35.C	29.00	26.00	27.00	18.00	50.50			0.09
	DIN32	A3.X32.35.C	35.00	32.00	30.00	18.00	64.00			0.08
	DIN40	A3.X40.35.C	41.00	38.00	30.00	21.00	64.00			0.14
	DIN50	A3.X50.35.C	53.00	50.00	30.00	21.00	77.50			0.18
	DIN65	A3.X65.35.C	70.00	66.00	30.00	21.00	91.00			0.23
	DIN80	A3.X80.35.C	85.00	81.00	30.00	21.00	106.00			0.28
	DIN100	A3.X100.35.C	104.00	100.00	30.00	21.00	130.00			0.40
ISO Abmessung ISO Dimension	ISO06	A3.U06.35.C	10.20	7.00	27.00	18.00	25.00			0.03
	ISO08	A3.U08.35.C	13.50	10.30	27.00	18.00	25.00			0.03
	ISO10	A3.U10.35.C	17.20	14.00	27.00	18.00	50.50			0.10
	ISO15	A3.U15.35.C	21.30	18.10	27.00	18.00	50.50			0.10
	ISO20	A3.U20.35.C	26.90	23.70	27.00	18.00	50.50			0.10
	ISO25	A3.U25.35.C	33.70	29.70	27.00	18.00	50.50			0.10
	ISO32	A3.U32.35.C	42.40	38.40	30.00	21.00	64.00			0.15
	ISO40	A3.U40.35.C	48.30	44.30	30.00	21.00	64.00			0.14
	ISO50	A3.U50.35.C	60.30	56.30	30.00	21.00	77.50			0.18
	ISO65	A3.U65.35.C	76.10	72.10	30.00	21.00	91.00			0.20
	ISO80	A3.U80.35.C	88.90	84.30	30.00	21.00	106.00			0.27
	ISO100	A3.U100.35.C	114.30	109.70	30.00	21.00	144.50			0.52

	Größe Size	Artikel-Nr. Article-No.	AD [mm]	ID [mm]	L [mm]	S [mm]	D [mm]			Gewicht Weight [kg]
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	A3.Q02.35.C	6.35	4.57	27.00	18.00	25.00			0.02
	OD $\frac{3}{8}$ "	A3.Q03.35.C	9.53	7.75	27.00	18.00	25.00			0.02
	OD $\frac{1}{2}$ "	A3.Q05.35.C	12.70	9.40	27.00	18.00	25.00			0.03
	OD $\frac{3}{4}$ "	A3.Q07.35.C	19.05	15.75	27.00	18.00	50.50			0.10
	OD1"	A3.Q10.35.C	25.40	22.10	27.00	18.00	50.50			0.10
	OD1 $\frac{1}{2}$ "	A3.Q15.35.C	38.10	34.80	27.00	18.00	50.50			0.08
	OD2"	A3.Q20.35.C	50.80	47.50	30.00	21.00	64.00			0.12
	OD2 $\frac{1}{2}$ "	A3.Q25.35.C	63.50	60.20	30.00	21.00	77.50			0.15
	OD3"	A3.Q30.35.C	76.20	72.90	30.00	21.00	91.00			0.18
	OD4"	A3.Q40.35.C	101.60	97.38	30.00	21.00	119.00			0.30
SMS Abmessung SMS Dimension	SMS06	A3.L06.35.C	8.00	6.00	27.00	18.00	25.00			0.02
	SMS08	A3.L08.35.C	10.00	8.00	27.00	18.00	25.00			0.02
	SMS10	A3.L10.35.C	12.00	10.00	27.00	18.00	25.00			0.02
	SMS15	A3.L15.35.C	18.00	16.00	27.00	18.00	50.50			0.10
	SMS20	A3.L20.35.C	22.00	20.00	27.00	18.00	50.50			0.09
	SMS25	A3.L25.35.C	25.00	22.60	27.00	18.00	50.50			0.09
	SMS32	A3.L32.35.C	32.00	29.60	27.00	18.00	50.50			0.08
	SMS40	A3.L40.35.C	38.00	35.60	30.00	21.00	64.00			0.14
	SMS50	A3.L50.35.C	51.00	48.60	30.00	21.00	77.50			0.18
	SMS65	A3.L65.35.C	63.50	60.30	30.00	21.00	77.50			0.14
	SMS80	A3.L80.35.C	76.10	72.90	30.00	20.00	91.00			0.18
	SMS100	A3.L100.35.C	101.60	97.60	30.00	20.00	119.00			0.29

5.4 bio-plus® Nutblindclamp bio-plus® Female Blind Clamp

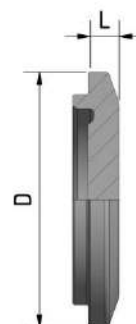


	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]						Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	G0.X04.35.C	25.00	5.50						0.02
	DIN06	G0.X06.35.C	25.00	5.50						0.02
	DIN08	G0.X08.35.C	25.00	5.50						0.02
	DIN10	G0.X10.35.C	25.00	5.50						0.01
	DIN15	G0.X15.35.C	50.50	6.00						0.08
	DIN20	G0.X20.35.C	50.50	6.00						0.08
	DIN25	G0.X25.35.C	50.50	6.00						0.07
	DIN32	G0.X32.35.C	64.00	6.00						0.07
	DIN40	G0.X40.35.C	64.00	6.50						0.13
	DIN50	G0.X50.35.C	77.50	6.50						0.19
	DIN65	G0.X65.35.C	91.00	7.00						0.28
	DIN80	G0.X80.35.C	106.00	7.00						0.37
	DIN100	G0.X100.35.C	130.00	8.00						0.65
ISO Abmessung ISO Dimension	ISO06	G0.U06.35.C	25.00	5.50						0.02
	ISO08	G0.U08.35.C	25.00	5.50						0.01
	ISO10	G0.U10.35.C	50.50	6.00						0.08
	ISO15	G0.U15.35.C	50.50	6.00						0.08
	ISO20	G0.U20.35.C	50.50	6.00						0.07
	ISO25	G0.U25.35.C	50.50	6.00						0.07
	ISO32	G0.U32.35.C	64.00	6.50						0.13
	ISO40	G0.U40.35.C	64.00	6.50						0.12
	ISO50	G0.U50.35.C	77.50	6.50						0.18
	ISO65	G0.U65.35.C	91.00	7.00						0.26
	ISO80	G0.U80.35.C	106.00	7.00						0.36
	ISO100	G0.U100.35.C	144.50	8.00						0.84

	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]						Gewicht Weight [kg]
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	G0.Q02.35.C	25.00	5.50						0.02
	OD $\frac{3}{8}$ "	G0.Q03.35.C	25.00	5.50						0.02
	OD $\frac{1}{2}$ "	G0.Q05.35.C	25.00	5.50						0.01
	OD $\frac{3}{4}$ "	G0.Q07.35.C	50.50	6.00						0.08
	OD1"	G0.Q10.35.C	50.50	6.00						0.07
	OD1 $\frac{1}{2}$ "	G0.Q15.35.C	50.50	6.00						0.07
	OD2"	G0.Q20.35.C	64.00	6.50						0.12
	OD2 $\frac{1}{2}$ "	G0.Q25.35.C	77.50	6.50						0.18
	OD3"	G0.Q30.35.C	91.00	7.00						0.27
	OD4"	G0.Q40.35.C	119.00	7.00						0.48
SMS Abmessung SMS Dimension	SMS06	G0.L06.35.C	25.00	5.50						0.02
	SMS08	G0.L08.35.C	25.00	5.50						0.02
	SMS10	G0.L10.35.C	25.00	5.50						0.01
	SMS15	G0.L15.35.C	50.50	6.00						0.08
	SMS20	G0.L20.35.C	50.50	6.00						0.08
	SMS25	G0.L25.35.C	50.50	6.00						0.07
	SMS32	G0.L32.35.C	50.50	6.00						0.07
	SMS40	G0.L40.35.C	64.00	6.50						0.13
	SMS50	G0.L50.35.C	77.50	6.50						0.19
	SMS65	G0.L65.35.C	77.50	6.50						0.18
	SMS80	G0.L80.35.C	91.00	7.00						0.27
	SMS100	G0.L100.35.C	119.00	7.00						0.46

5.5 bio-plus® Bundblindclamp

bio-plus® Male Blind Clamp



	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]						Gewicht Weight [kg]
DIN Abmessung DIN Dimension	DIN04	F0.X04.35.C	25.00	5.50						0.02
	DIN06	F0.X06.35.C	25.00	5.50						0.02
	DIN08	F0.X08.35.C	25.00	5.50						0.02
	DIN10	F0.X10.35.C	25.00	5.50						0.02
	DIN15	F0.X15.35.C	50.50	6.00						0.09
	DIN20	F0.X20.35.C	50.50	6.00						0.09
	DIN25	F0.X25.35.C	50.50	6.00						0.09
	DIN32	F0.X32.35.C	64.00	6.00						0.15
	DIN40	F0.X40.35.C	64.00	6.50						0.17
	DIN50	F0.X50.35.C	77.50	6.50						0.23
	DIN65	F0.X65.35.C	91.00	7.00						0.34
	DIN80	F0.X80.35.C	106.00	7.00						0.46
	DIN100	F0.X100.35.C	130.00	8.00						0.78
ISO Abmessung ISO Dimension	ISO06	F0.U06.35.C	25.00	5.50						0.02
	ISO08	F0.U08.35.C	25.00	5.50						0.02
	ISO10	F0.U10.35.C	50.50	6.00						0.09
	ISO15	F0.U15.35.C	50.50	6.00						0.09
	ISO20	F0.U20.35.C	50.50	6.00						0.09
	ISO25	F0.U25.35.C	50.50	6.00						0.09
	ISO32	F0.U32.35.C	64.00	6.50						0.16
	ISO40	F0.U40.35.C	64.00	6.50						0.16
	ISO50	F0.U50.35.C	77.50	6.50						0.24
	ISO65	F0.U65.35.C	91.00	7.00						0.34
	ISO80	F0.U80.35.C	106.00	7.00						0.45
	ISO100	F0.U100.35.C	144.50	8.00						0.93

	Größe Size	Artikel-Nr. Article-No.	D [mm]	L [mm]						Gewicht Weight [kg]
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	F0.Q02.35.C	25.00	5.50						0.02
	OD $\frac{3}{8}$ "	F0.Q03.35.C	25.00	5.50						0.02
	OD $\frac{1}{2}$ "	F0.Q05.35.C	25.00	5.50						0.02
	OD $\frac{3}{4}$ "	F0.Q07.35.C	50.50	6.00						0.09
	OD1"	F0.Q10.35.C	50.50	6.00						0.09
	OD1 $\frac{1}{2}$ "	F0.Q15.35.C	50.50	6.00						0.09
	OD2"	F0.Q20.35.C	64.00	6.50						0.16
	OD2 $\frac{1}{2}$ "	F0.Q25.35.C	77.50	6.50						0.23
	OD3"	F0.Q30.35.C	91.00	7.00						0.35
	OD4"	F0.Q40.35.C	119.00	7.00						0.59
SMS Abmessung SMS Dimension	SMS06	F0.L06.35.C	25.00	5.50						0.02
	SMS08	F0.L08.35.C	25.00	5.50						0.02
	SMS10	F0.L10.35.C	25.00	5.50						0.02
	SMS15	F0.L15.35.C	50.50	6.00						0.09
	SMS20	F0.L20.35.C	50.50	6.00						0.09
	SMS25	F0.L25.35.C	50.50	6.00						0.09
	SMS32	F0.L32.35.C	50.50	6.00						0.09
	SMS40	F0.L40.35.C	64.00	6.50						0.16
	SMS50	F0.L50.35.C	77.50	6.50						0.23
	SMS65	F0.L65.35.C	77.50	6.50						0.22
	SMS80	F0.L80.35.C	91.00	7.00						0.34
	SMS100	F0.L100.35.C	119.00	7.00						0.59

5.6 bio-plus® O-Ring

bio-plus® O-Ring

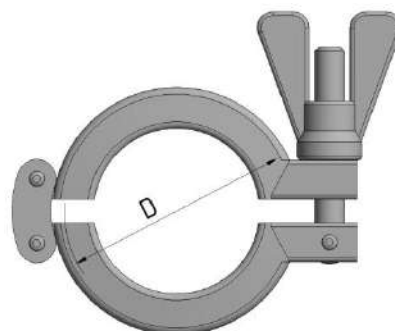
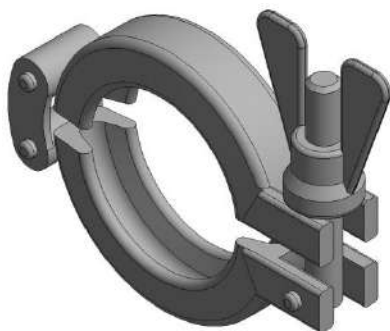


	Größe Size	Artikel-Nr. EPDM Article-No. EPDM	Artikel-Nr. FEP/ Silikon Article-No. FEP (Silicone core)	Artikel-Nr. FKM Article-No. FKM
DIN Abmessung DIN Dimension	DIN04	01.D04.0	01.D04.3	01.D04.2
	DIN06	01.D06.0	01.D06.3	01.D06.2
	DIN08	01.D08.0	01.D08.3	01.D08.2
	DIN10	01.N08.0	01.N08.3	01.N08.2
	DIN15	01.K07.0	01.K07.3	01.K07.2
	DIN20	01.D20.0	01.D20.3	01.D20.2
	DIN25	01.D25.0	01.D25.3	01.D25.2
	DIN32	01.D32.0	01.D32.3	01.D32.2
	DIN40	01.D40.0	01.D40.3	01.D40.2
	DIN50	01.D50.0	01.D50.3	01.D50.2
	DIN65	01.D65.0	01.D65.3	01.D65.2
	DIN80	01.D80.0	01.D80.3	01.D80.2
	DIN100	01.D100.0	01.D100.3	01.D100.2
ISO Abmessung ISO Dimension	ISO06	01.N06.0	01.N06.3	01.N06.2
	ISO08	01.N08.0	01.N08.3	01.N08.2
	ISO10	01.N10.0	01.N10.3	01.N10.2
	ISO15	01.N15.0	01.N15.3	01.N15.2
	ISO20	01.N20.0	01.N20.3	01.N20.2
	ISO25	01.N25.0	01.N25.3	01.N25.2
	ISO32	01.N32.0	01.N32.3	01.N32.2
	ISO40	01.N40.0	01.N40.3	01.N40.2
	ISO50	01.N50.0	01.N50.3	01.N50.2
	ISO65	01.N65.0	01.N65.3	01.N65.2
	ISO80	01.N80.0	01.N80.3	01.N80.2
	ISO100	01.N100.0	01.N100.3	01.N100.2

	Größe Size	Artikel-Nr. EPDM Article-No. EPDM	Artikel-Nr. FEP Article-No. FEP	Artikel-Nr. FKM Article-No. FKM
OD Abmessung OD Dimension	OD $\frac{1}{4}$ "	01.K02.0	01.K02.3	01.K02.2
	OD $\frac{3}{8}$ "	01.D08.0	01.D08.3	01.D08.2
	OD $\frac{1}{2}$ "	01.K05.0	01.K05.3	01.K05.2
	OD $\frac{3}{4}$ "	01.K07.0	01.K07.3	01.K07.2
	OD1"	01.K10.0	01.K10.3	01.K10.2
	OD1 $\frac{1}{2}$ "	01.K15.0	01.K15.3	01.K15.2
	OD2"	01.K20.0	01.K20.3	01.K20.2
	OD2 $\frac{1}{2}$ "	01.E65.0	01.E65.3	01.E65.2
	OD3"	01.K30.0	01.K30.3	01.K30.2
	OD4"	01.K40.0	01.K40.3	01.K40.2
SMS Abmessung SMS Dimension	SMS06	01.D06.0	01.D06.3	01.D06.2
	SMS08	01.D08.0	01.D08.3	01.D08.2
	SMS10	01.N08.0	01.N08.3	01.N08.2
	SMS15	01.K07.0	01.K07.3	01.K07.2
	SMS20	01.D20.0	01.D20.3	01.D20.2
	SMS25	01.K10.0	01.K10.3	01.K10.2
	SMS32	01.N25.0	01.N25.3	01.N25.2
	SMS40	01.E40.0	01.E40.3	01.E40.2
	SMS50	01.D50.0	01.D50.3	01.D50.2
	SMS65	01.E65.0	01.E65.3	01.E65.2
	SMS80	01.N65.0	01.N65.3	01.N65.2
	SMS100	01.K40.0	01.K40.3	01.K40.2

5.7 bio-plus® Klammer mit Flügelmutter

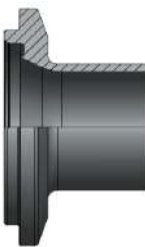
bio-plus® Clamp with wing nut



DIN11866-A	DIN11866-B	DIN11866	SMS	D	Artikel-Nr.	Gewicht
DIN	ISO	OD		[mm]	Article-No.	Weight
DIN04 / 06 / 08 / 10	ISO06 / 08	OD $\frac{1}{4}$ " / $\frac{3}{8}$ " / $\frac{1}{2}$ "	SMS06 / 08 / 10	25.00	C7.025.01	
				34.00	C7.034.01	
DIN20 / 25	ISO10 / 15 / 20 / 25	OD $\frac{3}{4}$ " / 1" / $\frac{1}{2}$ "	SMS15 / 20 / 25 / 32	50.50	C7.050.01	
DIN32 / 40	ISO32 / 40	OD2"	SMS40	64.00	C7.064.01	
DIN50	ISO50	OD2 $\frac{1}{2}$ "	SMS50 / 65	77.50	C7.077.01	
DIN65	ISO65	OD3"	SMS80	91.00	C7.091.01	
DIN80	ISO80			106.00	C7.106.01	
		OD4"	SMS100	119.00	C7.119.01	
DIN100				130.00	C7.130.01	
	ISO100			144.50	C7.144.01	

5.8 bio-plus® Erweitertes Produktsortiment

bio-plus® extended Product Range

			
IO	Nutklemmstutzen Reduktion	MO	Nutklemmstutzen Erweiterung
	Female Clamp Reduction		Female Clamp Enlargement
			
KO	Bundklemmstutzen Reduktion	LO	Bundklemmstutzen Erweiterung
	Male Clamp Reduc- tion		Male Clamp Enlar- gement
			
HO	Nutklemm- Endstutzen	EO	Bundklemm- Endstutzen
	Female Solid-end Clamp		Male Solid-end Clamp

5.9 Bestellschlüssel Ordering Key

1. Artikel / Article

AA	Klemmverbindung kompl. / Clamp Union compl.
A3	Bundklemmstutzen / Male Clamp
B3	Nutklemmstutzen / Female Clamp
F0	Bundblindclasp / Male Blind Clamp
G0	Nutblindclasp / Female Blind Clamp
O1	O-Ring / O-Ring
C7	Klammer / Clamp
weitere Ausführungen / further execution	
K0	Bundklemmstutzen Reduktion / Male Clamp Reduction
I0	Nutklemmstutzen Reduktion / Female Clamp Reduction
L0	Bundklemmstutzen Erweiterung / Male Clamp Enlargement
MO	Nutklemmstutzen Erweiterung / Female Clamp Enlargement
EO	Bundklemm-Endstutzen / Male Solid-end Clamp
HO	Nutklemm-Endstutzen / Female Solid-end Clamp

2. Norm / Standard

X	DIN Abmessung / DIN Dimension
U	ISO Abmessung / ISO Dimension
Q	OD Abmessung / OD Dimension
L	SMS Abmessung / SMS Dimension

2.1 Nennweite / Nominal Size (siehe Rohranschluss-Tabelle 003 / see table of pipe connections 003)

02	Nennweite DN02 / DN02 Nominal Size
03	Nennweite DN03 / DN03 Nominal Size
04	Nennweite DN04 / DN04 Nominal Size
05	Nennweite DN05 / DN05 Nominal Size
06	Nennweite DN06 / DN06 Nominal Size
07	Nennweite DN07 / DN07 Nominal Size
08	Nennweite DN08 / DN08 Nominal Size
10	Nennweite DN10 / DN10 Nominal Size
15	Nennweite DN15 / DN15 Nominal Size
20	Nennweite DN20 / DN20 Nominal Size
25	Nennweite DN25 / DN25 Nominal Size
30	Nennweite DN30 / DN30 Nominal Size
32	Nennweite DN32 / DN32 Nominal Size
40	Nennweite DN40 / DN40 Nominal Size
50	Nennweite DN50 / DN50 Nominal Size
65	Nennweite DN65 / DN65 Nominal Size
80	Nennweite DN80 / DN80 Nominal Size
100	Nennweite DN100 / DN100 Nominal Size

3. Material / Material

04	1.4404 (316L)
35	1.4435 BN2
39	1.4539
22	2.4602 (Hastelloy C22)
05	1.4305
01	1.4301

4. Dichtungsmaterial / Seal Material

0	EPDM (Standardausrüstung für Baugruppen / Standard for Assemblies)
1	Silikon / Silicone
2	FKM (Viton)
3	FEP / Sil (Silikon-Kern / Silicone core)
4	PEEK
5	FFKM (Kalrez)
6	PTFE rein / PTFE pure
7	FEP / EPDM (EPDM-Kern / EPDM core)
8	FEP / FKM (FKM-Kern / FKM core)

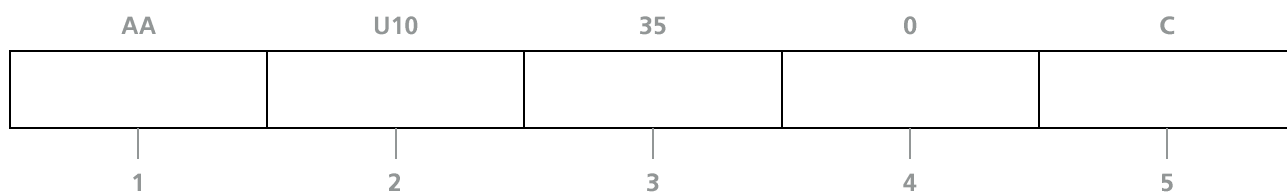
5. Oberfläche / Surfaces

C	Innenoberfläche Ra<0.6; elektropoliert / Internal Surface Ra<0.6; electropolished
E	Innenoberfläche Ra<0.4; elektropoliert / Internal Surface Ra<0.4; electropolished

weitere Oberflächen auf Anfrage / other surfaces on request

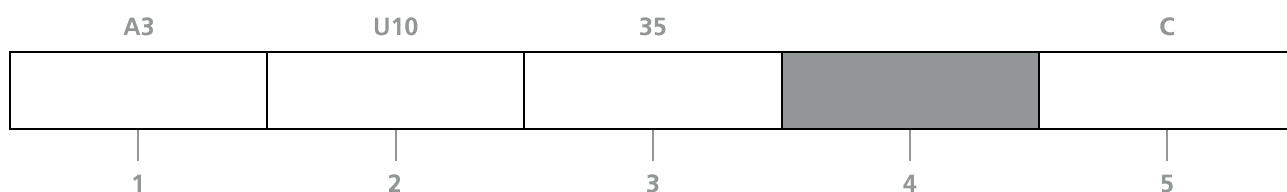
bio-plus® Komplettbaugruppe
bio-plus® Complete Assembly

Bestellbeispiel / Ordering example: AA.U10.35.0.C



bio-plus® Einzelteil
bio-plus® Single Component

Bestellbeispiel / Ordering example: A3.U10.35.C



bio-plus® O-Ring
bio-plus® O-Ring

Bestellbeispiel / Ordering example: 01.N10.0



5.10 Rohranschluss-Tabelle 003

Table of Pipe Connections 003

Nennweite Nominal Size	DIN 11866			SMS SMS
	Reihe A (DIN) Series A (DIN)	Reihe B (ISO) Series B (ISO)	Reihe C (OD) Series C (OD)	
02			Ø6.35x0.89	
03			Ø9.53x0.89	
04	Ø6.00x1.00			
05			Ø12.70x1.65	
06	Ø8.00x1.00	Ø10.20x1.60		Ø8.00x1.00
07			Ø19.05x1.65	
08	Ø10.00x1.00	Ø13.50x1.60		Ø10.00x1.00
10	Ø13.00x1.50	Ø17.20x1.60	Ø25.40x1.65	Ø12.00x1.00
15	Ø19.00x1.50	Ø21.30x1.60	Ø38.10x1.65	Ø18.00x1.00
20	Ø23.00x1.50	Ø26.90x1.60	Ø50.80x1.65	Ø22.00x1.00
25	Ø29.00x1.50	Ø33.70x2.00	Ø63.50x1.65	Ø25.00x1.20
30			Ø76.20x1.65	
32	Ø35.00x1.50	Ø42.40x2.00		Ø32.00x1.20
40	Ø 41.00x1.50	Ø48.30x2.00	Ø101.60x2.11	Ø38.00x1.20
50	Ø 53.00x1.50	Ø60.30x2.00		Ø51.00x1.20
65	Ø 70.00x2.00	Ø76.10x2.00		Ø63.50x1.60
80	Ø 85.00x2.00	Ø88.90x2.30		Ø76.10x1.60
100	Ø 104.00x2.00	Ø114.30x2.30		Ø101.60x2.00

Maß- und Konstruktionsänderungen vorbehalten. Revisionsdatum: 07/20
Specifications and design are subject to change without notice. Date of revision: 07/20

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