



MATRIX

Process Solutions

PUMPS
VALVES
FITTINGS
FILTRATION
ONSITE SERVICE
TANK EQUIPMENT
INSTRUMENTATION
HEAT EXCHANGERS
PROCESS DESIGN SERVICES

20
YEARS

PRODUCT
CATALOGUE
6th EDITION



ABOUT

MATRIX PROCESS SOLUTIONS is dedicated to supporting the Australian process industry. Our team of professionals specialise in all areas of the food, beverage and pharmaceutical industries. Each member of our unique team has years of industry experience prior to joining Matrix.

This combined knowledge and dedication makes us the ideal partner for any organisation seeking a support partner for all of their process equipment needs.

Matrix is the master distributor for Alfa Laval in Australia and thus we stock an unparalleled product range, technical support and onsite service. This combined with our commitment to improving process technology through intelligent design and implementation ensures that Matrix is your perfect business partner.

With offices in four major locations; Adelaide, Brisbane, Melbourne and Sydney Matrix can guarantee nationwide coverage and fast supply of all your critical process needs.



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Celebrating
95 Years
in Oceania



Proudly partnering with Matrix Process Solutions for customer excellence

This is Alfa Laval

Alfa Laval is not only committed to enabling customers to save water and reduce carbon footprint while driving profitability, but want to take the journey to sustainability together.

Our partnership with Matrix Process Solutions brings our market leading Hygienic Fluid Handling and Hygienic Heat Exchanger products close to you with a long time and committed Master Distributor for Australia.

Together we are committed to helping you achieve your business goals.

www.alfalaval.com.au

BSM UNIONS

Thread Type 

	BSM Unions Complete	Male Part 316s/s	Hex Nut 304s/s	Liner 316s/s	BSM Gasket EPDM	BSM Gasket Teflon	BSM Gasket Nitrile
SIZE							
25mm / 1"	9611307740	9611303890	9611300575	9612413801	9611992821	BSMOR025T	BSMOR025N
38mm / 1.5"	9611307741	9611303891	9611300576	9612413802	9611992822	BSMOR040T	BSMOR040N
51mm / 2"	9611307742	9611303892	9611300577	9612413803	9611992823	BSMOR050T	BSMOR050N
63mm / 2.5"	9611307743	9611303893	9611300578	9612413804	9611992824	BSMOR065T	BSMOR065N
76mm / 3"	9611307744	9611303894	9611300579	9612413805	9611992825	BSMOR080T	BSMOR080N
101mm / 4"	9611307745	9611303895	9611300521	9612413806	9611992826	BSMOR100T	BSMOR100N
150mm / 6"	BSMUN1506	BSMMP1506	BSMHN1504	BSMWL1506	BSMOR150E	BSMOR150T	BSMOR150N

CIP UNIONS - FLAT FACED

Thread Type 

	CIP Unions Complete	Male Part 316s/s	Hex Nut 304s/s	Liner 316s/s	CIP Gasket EPDM	CIP Gasket Teflon	CIP Gasket Nitrile
SIZE							
25mm / 1"	BSMCIPUN025	9612039401	9611300575	9612412101	9612427007	CIPOR025T	CIPOR025N
38mm / 1.5"	BSMCIPUN040	9612039402	9611300576	9612412102	9612427008	CIPOR040T	CIPOR040N
51mm / 2"	BSMCIPUN050	9612039403	9611300577	9612412103	9612427009	CIPOR050T	CIPOR050N
63mm / 2.5"	BSMCIPUN065	9612039404	9611300578	9612412104	9612427010	CIPOR065T	CIPOR065N
76mm / 3"	BSMCIPUN080	9612039405	9611300579	9612412105	9612427011	CIPOR080T	CIPOR080N
101mm / 4"	BSMCIPUN100	9612039406	9611300521	9612412106	9612427012	CIPOR100T	CIPOR100N
125mm / 5"	BSMCIPUN125	CIPMP1256	BSMHN1254	CIPWL1256	CIPOR125E	CIPOR125T	CIPOR125N
150mm / 6"	BSMCIPUN150	CIPMP1506	BSMHN1504	CIPWL1506	CIPOR150E	CIPOR150T	CIPOR150N

NZ UNIONS

	NZ Unions Complete (Hex Nuts)*	Male Part 316s/s	Round Nut 304s/s	Liner 316s/s	NZ Gasket EPDM
SIZE					
25mm / 1"	BSMNZUN025	9611303890	9612411907	9612412201	9612417107
38mm / 1.5"	BSMNZUN040	9611303891	9612411908	9612412202	9612417108
51mm / 2"	BSMNZUN050	9611303892	9612411909	9612412203	9612417109
63mm / 2.5"	BSMNZUN065	9611303893	9612411910	9612412204	9612417110
76mm / 3"	BSMNZUN080	9611303894	9612411911	9612412205	9612417111
101mm / 4"	BSMNZUN100	9611303895	9612411912	9612412206	9612417112

* Available with Round Nuts on request

CLAMP UNIONS



Clamp Unions Complete
(Type 1 EPDM Gasket)



Short Ferrules
(12.7mm)



Standard Ferrules
(28.6mm)



Heavy Duty Clamp



End Cap



High Pressure Clamp 13MHP



SIZE

13mm / 1/2"	TCUNION0156	9611340178	9611340318	9612011200	9611340599	13MHP-0.5
19mm / 3/4"	TCUNION0206	9611340179	9611340319	9612011200	9611340599	13MHP-0.5
25mm / 1"	TCUNION0256	9611340180	9611340320	9611991508	9611340600	9630210180
38mm / 1.5"	TCUNION0406	9611340181	9611340321	9611991508	9611340600	9630210180
51mm / 2"	TCUNION0506	9611340182	9611340322	9611991509	9611340601	9630210040
63mm / 2.5"	TCUNION0656	9611340183	9611340323	9611991510	9611340602	9630210213
76mm / 3"	TCUNION0806	9611340184	9611340324	9611991511	9611340603	9630210248
101mm / 4"	TCUNION1006	9611340185	9611340325	9611991512	9611340604	9630210042
150mm / 6"	TCUNION1506		9611340186	9612011206	9611340605	13MHP-6
200mm / 8"	TCUNION2006		9611340187	9612011207	9611340606	13MHP-8

GASKET TYPE 1

EPDM

VITON

NITRILE

Solid PTFE

SILICONE White

BUNA White



SIZE

13mm / 1/2"	290273	290274	290272	290270	290090	
19mm / 3/4"	290265	290266	290264	290271	290099	
25mm / 1"	290141	290009	298451	298224	298512	298501
38mm / 1.5"	290044	290022	298542	298227	298507	298495
51mm / 2"	290043	290030	298453	298228	298508	298496
63mm / 2.5"	290048	290040	298454	298223	298509	298499
76mm / 3"	290036	290049	298455	298225	298510	298497
101mm / 4"	290018	290053	298456	298226	298511	298498
150mm / 6"	290234	290220	290112	298235	298605	
200mm / 8"				298236	298606	
250mm / 10"				298237	298607	
300mm / 12"				290168	298608	

GASKET TYPE 2 Flanged / lipped

EPDM

VITON

NITRILE

SILICONE White

BUNA White

VITON White

Teflon / Viton Type 3 Envelope



SIZE

25mm / 1"	290031	290097	9611990765	298411	298308	290071	290072
38mm / 1.5"	290038	290115	9611990766	298412	298431	290070	290073
51mm / 2"	290017	290117	9611990767	298413	298417	290062	290074
63mm / 2.5"	290035	290118	9611990768	298414	290069	290057	290075
76mm / 3"	290138	290119	9611990769	298415	298432	290055	290076
101mm / 4"	290025	290172	9611990770	298416	298433	290086	290077
150mm / 6"	290131	290182	9630298220		290236		290085
200mm / 8"	290114	290202			290250		
250mm / 10"	290226	290237			290252		
300mm / 12"	290088						

TRI-CLOVER ACCESSORIES

MESH SCREEN GASKETS 40MPS, ORIFACE A80MP

	BUNA 6 MESH	BUNA 10 MESH (standard)	EPDM 10 MESH	EPDM 60 MESH	EPDM 80 MESH	EPDM 100 MESH
SIZE						
38mm / 1.5"	40MPS-U-1.5-6M	298488	40MPS-E-1.5-10M	40MPS-E-1.5-60M	40MPS-E-1.5-80M	40MPS-E-1.5-80M
51mm / 2"	40MPS-U-2-6M	298434	40MPS-E-2-10M	40MPS-E-2-60M	40MPS-E-2-80M	40MPS-E-2-80M
63mm / 2.5"	40MPS-U-2.5-6M	298436	40MPS-E-2.5-10M	40MPS-E-2.5-60M	40MPS-E-2.5-80M	40MPS-E-2.5-80M
76mm / 3"	40MPS-U-3-6M	290034	40MPS-E-3-10M	40MPS-E-3-60M	40MPS-E-3-80M	40MPS-E-3-80M
101mm / 4"	40MPS-U-4-6M	298438	40MPS-E-4-10M	40MPS-E-4-60M	40MPS-E-4-80M	40MPS-E-4-80M



Tri-Clover fittings catalog circa 1947.

TRI-CLOVER HOSE TAILS

ROTARY SWING JOINT A12MPS

A80MP ORIFACE EPDM. 316 0.125" hole

SIZE	TRI-CLOVER HOSE TAILS	ROTARY SWING JOINT A12MPS	A80MP ORIFACE EPDM. 316 0.125" hole
25mm / 1"	HOSET0256TC	not available	
38mm / 1.5"	HOSET0406TC	210135	290248
51mm / 2"	HOSET0506TC	210136	290255
63mm / 2.5"	HOSET0656TC	210137	290314
76mm / 3"	HOSET0806TC	210138	290275
101mm / 4"	HOSET1006TC	210140	on request

SMS UNION

Thread Type









	Complete Union	Male Part 316s/s	Liner 316s/s	Nut 304s/s	End Cap with Chain	EPDM	NBR	PTFE	FPM
SIZE									
25mm / 1"	9611330382	191001	190994	190613	9612145108	3131703753	190601	3131705511	3131703752
32mm 1.25"	9611330389	191002	190995	190614	Not Available	3131703762	190602	3131705512	9611991306
38mm / 1.5"	9611330383	191003	190996	190615	9612145109	3131703772	190603	3131705513	191661
51mm / 2"	9611330384	191004	190997	190616	9612145110	3131703785	190604	3131705514	3131703782
63mm / 2.5"	9611330385	191005	190998	190617	9612145111	3131703793	190605	3131705515	3131703792
76mm / 3"	9611330386	191006	190999	190618	9612145112	3131703803	190606	3131705516	3131703801
101mm / 4"	9611330387	3131708173	3131708852	3131708841	9612145113	3134708862	3131708861	3131705517	3131708863

DIN UNIONS

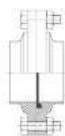





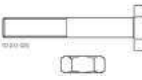
Thread Type



	Complete Union	Male Part 316s/s	Liner 316s/s	Nut 304s/s	End Cap with Chain	DIN Blank
SIZE						
DN10	9611305791	9611305901	9611305951	9611306420	9611152301	9612152413
DN15	9611305801	9611305911	9611305961	9611306430	9612152302	9612152414
DN20	9611290012	9611290032	9611290042	9611290021	9613152303	9612152415
DN25	9611331119	9611331087	9611331095	3131800141	9614152304	9612152416
DN32	9611331120	9611331088	9611331096	3131800142	9615152305	9612152417
DN40	9611331121	9611331089	9611331097	3131800143	9616152306	9612152418
DN50	9611331122	9611331090	9611331098	3131800144	9617152307	9612152419
DN65	9611331123	9611331091	9611331099	3131800145	9618152308	9612152420
DN80	9611331124	9611331092	9611331100	3131800146	9619152309	9612152422
DN100	9611331126	9611331094	9611331102	3131800148	9620152310	9612152423
DN125		9611306131	9611306181	9611306450	9621152311	9612152424
DN150		9611306141	9611306191	9611306460	9622152312	9612152425
25mm / 1"	9611330394	9612157917	9612158017	3131800141	9614152304	9611991269
38mm / 1.5"	9611330395	9612157919	9612158019	3131800143	9616152306	9611991271
51mm / 2"	9611330396	9612157920	9612158020	3131800144	9617152307	9611991272
63mm / 2.5"	9611330397	9612157921	9612158021	3131800145	9618152308	9611991273
76mm / 3"	9611330398	9612157923	9612158023	3131800146	9619152309	9611991275
101mm / 4"	9611330399	9612157924	9612158024	3131800148	9620152310	9611991276

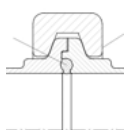
	EPDM Gasket Black	NBR Gasket Blue	PTFE Gasket	FPM Gasket	EPDM Lipped Gasket
SIZE					
DN10	9611991267	52734601	9611991873	9611991861	9611900253
DN15	9611991268	52734602	9611991874	9611991862	9611900254
DN20	9611991323	52734603	9611991875	9611991863	9611900255
DN25	9611991269	52734604	9611991876	9611991864	9611900256
DN32	9611991270	52734605	9611991877	9611991865	9611900257
DN40	9611991271	52734606	9611991878	9611991866	9611900258
DN50	9611991272	52734607	9611991879	9611991867	9611900259
DN65	9611991273	52734608	9611991880	9611991868	9611900260
DN80	9611991275	52734609	9611991882	9611991128	9611900261
DN100	9611991276	52734611	9611991883	9611991870	9611900263
DN125	9611991277	9611991265	9611991884	9611991871	9611900264
DN150	9611991278	9611991266	9611991885	9611991872	9611900265
25mm / 1"	9611991269	52734604	9611991876	9611991864	9611991864
32mm 1.25"	9611991270	52734605	9611991877	9611991865	9611991865
38mm / 1.5"	9611991271	52734606	9611991878	9611991866	9611991866
51mm / 2"	9611991272	52734607	9611991879	9611991867	9611991867
63mm / 2.5"	9611991273	52734608	9611991880	9611991868	9611991868
76mm / 3"	9611991275	52734609	9611991882	9611991128	9611991128
101mm / 4"	9611991276	52734611	9611991883	9611991870	9611991870

ALFA LAVAL SANITARY FLANGE UNION

	Complete Union	Flange without Oring groove	Flange with Oring groove	Seal EPDM	Seal Silicone	Seal FPM	Screw and Nut set
SIZE							
25mm / 1"	9612498710	9612492910	9612493010	9612402631	9612402641	9612402651	9612499301
38mm / 1.5"	9612498711	9612492911	9612493011	9612402632	9612402642	9612402652	9612499301
51mm / 2"	9612498712	9612492912	9612493012	9612402633	9612402643	9612402653	9612499301
63mm / 2.5"	9612498713	9612492913	9612493013	9612402634	9612402644	9612402654	9612499301
76mm / 3"	9612498714	9612492914	9612493014	9612402635	9612402645	9612402655	9612499301
101mm / 4"	9612498715	9612492915	9612493015	9612402636	9612402646	9612402656	9612499302

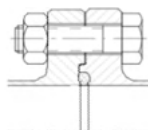
DIN 11864-1, -2, -3 SANITARY UNIONS

DIN 11864-3

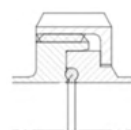


Available on request

DIN 11864-2



DIN 11864-1



AVAILABLE SIZES

DN10	1/2"
DN15	3/4"
DN20	
DN25	1"
DN32	
DN40	1.5"
DN50	2"
DN65	2.5"
DN80	3"
DN100	4"
DN125	
DN150	

MISCELLANEOUS FITTINGS

BSM REDUCING LINERS MACHINED



SIZE	
38 x 25mm	9611307791
51 x 25mm	9611307801
51 x 38mm	9611307811
63 x 25 mm	9611307820
63 x 38 mm	9611307821
63 x 51 mm	9611307831
76 x 25 mm	9611307840
76 x 38 mm	9611307841
76 x 51 mm	9611307851
76 x 63 mm	9611307861
100 x 63mm	9611307871
100 x 76mm	9611307881

HOSE TAILS MACHINED



SIZE	
18mm / 3/4"	HOSET0206M
25mm / 1"	HOSET0256M
32mm / 1.25"	HOSET0326M
38mm / 1.5"	HOSET0406M
51mm / 2"	HOSET0506M
63mm / 2.5"	HOSET0656M
76mm / 3"	HOSET0806M
101mm / 4"	HOSET1006M
125mm / 5"	
150mm / 6"	
200mm / 8"	

HOSE TAILS BUTT WELD SINGLE ROLL



HOSET0256	EC0256D
HOSET0326	EC0326D
HOSET0406	EC0406D
HOSET0506	EC0506D
HOSET0656	EC0656D
HOSET0806	EC0806D
HOSET1006	EC1006D
HOSET1256	
HOSET1506	EC1506D
	EC2006D

DOMED END CAPS



BSM Blank Hex Nut



BSM Blank Cap



BSMBN0254	9611330629
BSMBN0404	9611330630
BSMBN0504	9611330631
BSMBN0654	9611330632
BSMBN0804	9611330633
BSMBN1004	9611330634
BSMBN1254	BSMBC1256
BSMBN1504	BSMBC1506

'PEDCO' HYGENIC UNIONS

Thread Type 

	Union Complete	Male Part 316s/s	Hex Nut 304s/s	Liner 316s/s	Gasket EPDM	Gasket Teflon	Blank Cap
SIZE							
12mm / 1/2"	PHUUN0156	PHUMP0156	BSMHN0154	PHUWL0156	PHUOR0156	PHUOR0156T	PHUBC0156
18mm / 3/4"	PHUUN0206	PHUMP0206	BSMHN0204	PHUWL0206	PHUOR0206	PHUOR0206T	PHUBC0206
25mm / 1"	PHUUN0256	PHUMP0256	9611300575	PHUWL0256	PHUOR0256	PHUOR0256T	PHUBC0256
38mm / 1.5"	PHUUN0406	PHUMP0406	9611300576	PHUWL0406	PHUOR0406	PHUOR0406T	PHUBC0406
51mm / 2"	PHUUN0506	PHUMP0506	9611300577	PHUWL0506	PHUOR0506	PHUOR0506T	PHUBC0506
63mm / 2.5"	PHUUN0656	PHUMP0656	9611300578	PHUWL0656	PHUOR0656	PHUOR0656T	PHUBC0656
76mm / 3"	PHUUN0806	PHUMP0806	9611300579	PHUWL0806	PHUOR0806	PHUOR0806T	PHUBC0806
101mm / 4"	PHUUN1006	PHUMP1006	9611300521	PHUWL1006	PHUOR1006	PHUOR1006T	PHUBC1006




IDF UNION

Thread Type 

	Complete Union	Male Part	Liner	Nut	Gasket NBR
SIZE					
25mm / 1"	9611330955	3131900621	3131900681	9611300053	3131900311
38mm / 1.5"	9611330956	3131900631	3131900691	9611300054	3131900321
51mm / 2"	9611330957	3131900153	3131900273	9611300055	3131900331
63mm / 2.5"	9611330958	3131900163	3131900711	9611300056	3131900341
76mm / 3"	9611330959	3131900173	3131900721	9611300057	3131900351
101mm / 4"	9611330960	9611303815	9611303835	9611303970	9611991477

WINE UNIONS

	Male Part Butt Weld	Liner Butt Weld	Wine Nut Brass	Liner Slip On Weld	Wine Gasket White Rubber	Nut Stainless Steel
SIZE						
25mm / 1"	WINMP0256	WINLB0256	WINNU025B	WINLS0256	WINOR025WR	WINNU0254S
38mm / 1.5"	WINMP0406	WINLB0406	WINNU040B	WINLS0406	WINOR040WR	WINNU0404S
51mm / 2"	WINMP0506	WINLB0506	WINNU050B	WINLS0506	WINOR050WR	WINNU0504S
63mm / 2.5"	WINMP0656	WINLB0656	WINNU065B	WINLS0656	WINOR065WR	WINNU0654S
76mm / 3"	WINMP0806	WINLB0806	WINNU080B	WINLS0806	WINOR080WR	WINNU0804S
101mm / 4"	WINMP1006	WINLB1006	WINNU100B	WINLS1006	WINOR100WR	WINNU1004S

	90 Deg Polished 304s/s	90 Deg Polished 316s/s	45 Deg Polished 316s/s	180 Deg Polished 316s/s	90 Deg 1D bends	90 Deg 3xD Long Radius 316s/s
SIZE						
12mm / 1/2"		BENDP0156090	BENDP0156045	BENDP0156180		
18mm / 3/4"	BENDP0204090	BENDP0206090	BENDP0206045	BENDP0206180		
25mm / 1"	9612636501	9612636507	BENDP0256045	BENDP0256180	BENDP02561XD	9612928268
38mm / 1.5"	9612636502	9612636508	BENDP0406045	BENDP0406180	BENDP04061XD	9612928270
51mm / 2"	9612636503	9612636509	BENDP0506045	BENDP0506180	BENDP05061XD	9612928271
63mm / 2.5"	9612636504	9612636510	BENDP0656045	BENDP0656180	BENDP06561XD	9612928272
76mm / 3"	9612636505	9612636511	BENDP0806045	BENDP0806180	BENDP08061XD	9612928273
101mm / 4"	9612636506	9612636512	BENDP1006045	BENDP1006180	BENDP10061XD	
125mm / 5"	BENDP1254090	BENDP1256090	BENDP1256045	BENDP1256180		
150mm / 6"	BENDP1504090	BENDP1506090	BENDP1506045	BENDP1506180		



TEES

EQUAL REDUCING TEES 316S/S



PULLED REDUCING TEES 316S/S



SIZE		
25 x 8	TEERP025-0106	TEEPP025-0104
25 x 12	TEERP025-0156	TEEPP025-0156
25 x 18	TEERP025-0206	TEEPP025-0206
32 x 12	TEERP032-0156	TEEPP032-0156
32 x 18	TEERP032-0206	TEEPP032-0120
32 x 25	TEERP032-0256	TEEPP032-0256
38 x 12	TEERP040-0156	TEEPP040-0156
38 x 18	TEERP040-0206	TEEPP040-0206
38 x 25	TEERP040-0256	TEEPP040-0256
38 x 32	TEERP040-0326	TEEPP040-0326
51 x 12	TEERP050-0156	TEEPP050-0156
51 x 18	TEERP050-0206	TEEPP050-0206
51 x 25	TEERP050-0256	TEEPP050-0256
51 x 32	TEERP050-0326	TEEPP050-0326
51 x 38	TEERP050-0406	TEEPP050-0406
63 x 12	TEERP065-0156	TEEPP065-0156
63 x 18	TEERP065-0206	TEEPP065-0206
63 x 25	TEERP065-0256	TEEPP065-0256
63 x 32	TEERP065-0326	TEEPP065-0326
63 x 38	TEERP065-0406	TEEPP065-0406
63 x 51	TEERP065-0506	TEEPP065-0506
76 x 12	TEERP080-0156	TEEPP080-0156
76 x 18	TEERP080-0206	TEEPP080-0206
76 x 25	TEERP080-0256	TEEPP080-0256
76 x 32	TEERP080-0326	TEEPP080-0326
76 x 38	TEERP080-0406	TEEPP080-0406
76 x 51	TEERP080-0506	TEEPP080-0506
76 x 63	TEERP080-0656	TEEPP080-0656
101 x 12	TEERP100-0156	TEEPP100-0156
101 x 18	TEERP100-0206	TEEPP100-0206
101 x 25	TEERP100-0256	TEEPP100-0256
101 x 32	TEERP100-0326	TEEPP100-0326
101 x 38	TEERP100-0406	TEEPP100-0406
101 x 51	TEERP100-0506	TEEPP100-0506
101 x 63	TEERP100-0656	TEEPP100-0656
101 x 76	TEERP100-0806	TEEPP100-0806
125 x 51	TEERP125-0506	TEEPP125-0506
150 x 25	TEERP150-0256	TEEPP150-0256
150 x 32	TEERP150-0326	TEEPP150-0326
150 x 38	TEERP150-0406	TEEPP150-0406
150 x 51	TEERP150-0506	TEEPP150-0506
150 x 63	TEERP150-0656	TEEPP150-0656
150 x 76	TEERP150-0806	TEEPP150-0806
150 x 101	TEERP150-1006	TEEPP150-1006

EQUAL TEE Polished 316s/s



PULLED TEE Polished 316s/s



SIZE		
13mm / 1/2"	TEEEP0156	
19mm / 3/4"	TEEEP0206	
25mm / 1"	TEEEP0256	TEEPP0256
32mm / 1.25"	TEEEP0326	TEEPP0326
38mm / 1.5"	TEEEP0406	TEEPP0406
51mm / 2"	TEEEP0506	TEEPP0506
63mm / 2.5"	TEEEP0656	TEEPP0656
76mm / 3"	TEEEP0806	TEEPP0806
101mm / 4"	TEEEP1006	TEEPP1006
125mm / 5"	TEEEP1256	TEEPP1256
150mm / 6"	TEEEP1506	TEEPP1506
200mm / 8"	TEEEP2006	

'Y' PIECE Polished 316s/s



PULLED CROSS Polished 316s/s



CROSS PIECE Polished 316s/s



SIZE			
13mm / 1/2"	TEEYP0156		CROEP0156
19mm / 3/4"	TEEYP0206		CROEP0206
25mm / 1"	TEEYP0256	CROPP0256	CROEP0256
32mm / 1.25"	TEEYP0326	CROPP0326	CROEP0326
38mm / 1.5"	TEEYP0406	CROPP0406	CROEP0406
51mm / 2"	TEEYP0506	CROPP0506	CROEP0506
63mm / 2.5"	TEEYP0656	CROPP0656	CROEP0656
76mm / 3"	TEEYP0806	CROPP0806	CROEP0806
101mm / 4"	TEEYP1006	CROPP1006	CROEP1006
125mm / 5"	TEEYP1256	CROPP1256	CROEP1256
150mm / 6"	TEEYP1506	CROPP1506	CROEP1506

45 DEGREE TEES 316s/s



SWEPT TEE Polished 316s/s



SIZE		
25mm / 1"	TEEAP025645	TEESP0256
38mm / 1.5"	TEEAP040645	TEESP0406
51mm / 2"	TEEAP050645	TEESP0506
63mm / 2.5"	TEEAP065645	TEESP0656
76mm / 3"	TEEAP080645	TEESP0806
101mm / 4"	TEEAP100645	TEESP1006

TUBE REDUCERS

316S/S POLISHED

CONCENTRIC REDUCERS

ECCENTRIC REDUCERS



SIZE		
12 x 8mm	CONCP015-0086	ECCEP015-0086
12 x 10mm	CONCP015-0106	ECCEP015-0106
20 x 12mm	CONCP020-0156	ECCEP020-0156
25 x 6mm	CONCP025-0066	
25 x 12mm	CONCP025-0156	ECCEP025-0156
25 x 20mm	CONCP025-0206	ECCEP025-0206
32 x 12mm	CONCP032-0156	ECCEP032-0156
32 x 18mm	CONCP032-0206	ECCEP032-0206
32 x 25mm	CONCP032-0256	ECCEP032-0256
38 x 12mm	CONCP040-0156	ECCEP040-0156
38 x 18mm	CONCP040-0206	ECCEP040-0206
38 x 25mm	CONCP040-0256	ECCEP040-0256
38 x 32mm	CONCP040-0326	ECCEP040-0326
51 x 10mm	CONCP050-0106	
51 x 12mm	CONCP050-0156	ECCEP050-0156
51 x 18mm	CONCP050-0206	ECCEP050-0206
51 x 25mm	CONCP050-0256	ECCEP050-0256
51 x 32mm	CONCP050-0326	ECCEP050-0326
51 x 38mm	CONCP050-0406	ECCEP050-0406
63 x 18mm	CONCP065-0206	
63 x 25mm	CONCP065-0256	ECCEP065-0256
63 x 32mm	CONCP065-0326	ECCEP065-0326
63 x 38mm	CONCP065-0406	ECCEP065-0406
63 x 51mm	CONCP065-0506	ECCEP065-0506
76 x 12mm	CONCP080-0156	
76 x 25mm	CONCP080-0256	ECCEP080-0256
76 x 32mm	CONCP080-0326	
76 x 38mm	CONCP080-0406	ECCEP080-0406
76 x 51mm	CONCP080-0506	ECCEP080-0506
76 x 63mm	CONCP080-0656	ECCEP080-0656

CONCENTRIC REDUCERS

ECCENTRIC REDUCERS



SIZE		
101 x 18mm	CONCP100-0206	
101 x 25mm	CONCP100-0256	ECCEP100-0256
101 x 32mm	CONCP100-0326	
101 x 38mm	CONCP100-0406	ECCEP100-0406
101 x 51mm	CONCP100-0506	ECCEP100-0506
101 x 63mm	CONCP100-0656	ECCEP100-0656
101 x 76mm	CONCP100-0806	ECCEP100-0806
125 x 25mm	CONCP125-0256	ECCEP125-0256
125 x 51mm	CONCP125-0506	ECCEP125-0506
125 x 63mm	CONCP125-0656	ECCEP125-0656
125 x 76mm	CONCP125-0806	ECCEP125-0806
125 x 101mm	CONCP125-1006	ECCEP125-1006
150 x 18mm	CONCP150-0206	
150 x 25mm	CONCP150-0256	ECCEP150-0256
150 x 38mm	CONCP150-0406	ECCEP150-0406
150 x 51mm	CONCP150-0506	ECCEP150-0506
150 x 63mm	CONCP150-0656	ECCEP150-0656
150 x 76mm	CONCP150-0806	ECCEP150-0806
150 x 101mm	CONCP150-1006	ECCEP150-1006
150 x 125mm	CONCP150-1256	ECCEP150-1256
200 x 51mm	CONCP200-0506	ECCEP200-0506
200 x 63mm	CONCP200-0656	ECCEP200-0656
200 x 76mm	CONCP200-0806	ECCEP200-0806
200 x 101mm	CONCP200-1006	ECCEP200-1006
200 x 125mm	CONCP200-1256	ECCEP200-1256
200 x 150mm	CONCP200-1506	ECCEP200-1506
250 x 100mm	CONCP250-1006	ECCEP250-1006
250 x 150mm	CONCP250-1506	ECCEP250-1506
250 x 200mm	CONCP250-2006	ECCEP250-2006
300 x 101mm	CONCP300-1006	ECCEP300-1006
300 x 150mm	CONCP300-1506	ECCEP300-1506
300 x 200mm	CONCP300-2006	ECCEP300-2006
300 x 250mm	CONCP300-2506	ECCEP300-2506

Custom sizes available on request

TRI-CLOVER® ULTRAPURE FITTINGS



TRI-CLOVER BIOPHARM TUBES AND FITTINGS

Tubes and fittings in the BioPharm range are manufactured in accordance with extra-strict quality assurance procedures.

All cold-formed BioPharm tubular products feature consistent wall thicknesses as a result of the use of fabrication grade tubing. Once cold forming has been completed, these tubular products are resized to ensure that their ovality always falls within the prescribed tolerances.

AVAILABLE STANDARDS

ASME BPE	DIN11866 Range A
ISO 1127	DIN11866 Range B
ISO 2037	

SIZE

IMPERIAL	DN10 - DN150
METRIC	1/2" - 6"

CODE	STD	SURFACE FINISH		
		INSIDE	OUTSIDE	
PL	ASME BPE	<0.5	<0.8	SF1
PM	ASME BPE	<0.4 EP	<0.8	SF4
H4o	DIN11866	<0.8	<0.8	
H3o	DIN11866	<0.4	<0.8	

B2S	B2CNW	B2CMP	B2UMPBOA
B2KS	B2KS	B2KMP	B2UMPSOA
B7WWW	B7WWM	B7MP	B7WWMS
B7WMSW	B7MPS	B7RWWW	B7RWWM
B7RMP	B7RWWMS	B7RMPS	B7IMPS
B7IWWMS	B9WWW	B9MP	B9RWWW
B31	B31M	B31 - 14MP	B32
B32M	B32 - 14MP	B16W	14MPHR

FLANGES

**SLIP ON FLANGE
T/S TUBE
316 s/s TABLE D**



**BLIND FLANGE
316 s/s TABLE D**



**SLIP ON FLANGE
T/S TUBE
316 s/s TABLE E**



**BLIND FLANGE
316 s/s TABLE E**



NB	INCH				
12mm	1/2"			FLANG0156E	
19mm	3/4"			FLANG0206E	FLANG0206BE
25mm	1"	FLANG0256SD		FLANG0256SE	FLANG0256BE
32mm	1.25"	FLANG0326SD		FLANG0326SE	
38mm	1.5"	FLANG0406SD	FLANG0406BD	FLANG0406SE	FLANG0406BE
51mm	2"	FLANG0506SD	FLANG0506BD	FLANG0506SE	FLANG0506BE
63.5mm	2.5"	FLANG0656SD	FLANG0656BD	FLANG0656SE	FLANG0656BE
76mm	3"	FLANG0806SD	FLANG0806BD	FLANG0806SE	FLANG0806BE
101mm	4"	FLANG1006SD	FLANG1006BD	FLANG1006SE	FLANG1006BE
125mm	5"	FLANG1256SD	FLANG1254BD	FLANG1256SE	FLANG1256BE
150mm	6"	FLANG1506SD	FLANG1506BD	FLANG1506SE	FLANG1506BE
200mm	8"	FLANG2006SD	FLANG2006BD	FLANG2006SE	FLANG2006BE

ANSI, DIN, PN16 and other Flange standards available.

Welding Neck Flange



Plate Flange



Slip-On Flange



Blind Flange



Welding Neck Flange



Blind Flange



Slip-On Flange



Lap Joint Flange



COMPRESSION FITTINGS

Straight Connector

Union Elbow

Union Tee

Union Cross

Bulk Head Union



SIZE

1/8"	TSU2	TSEU2	TSTU2		TSBHU2
1/4"	TSU4	TSEU4	TSTU4	TSCR4	TSBHU4
3/8"	TSU6	TSEU6	TSTU6	TSCR6	TSBHU6
1/2"	TSU8	TSEU8	TSTU8	TSCR8	TSBHU8
5/8"	TSU10	TSEU10	TSTU10		TSBHU10
3/4"	TSU12	TSEU12	TSTU12		TSBHU12
1"	TSU16	TSEU16	TSTU16		TSBHU16

Male Connector

Female Connector

Reducing Union

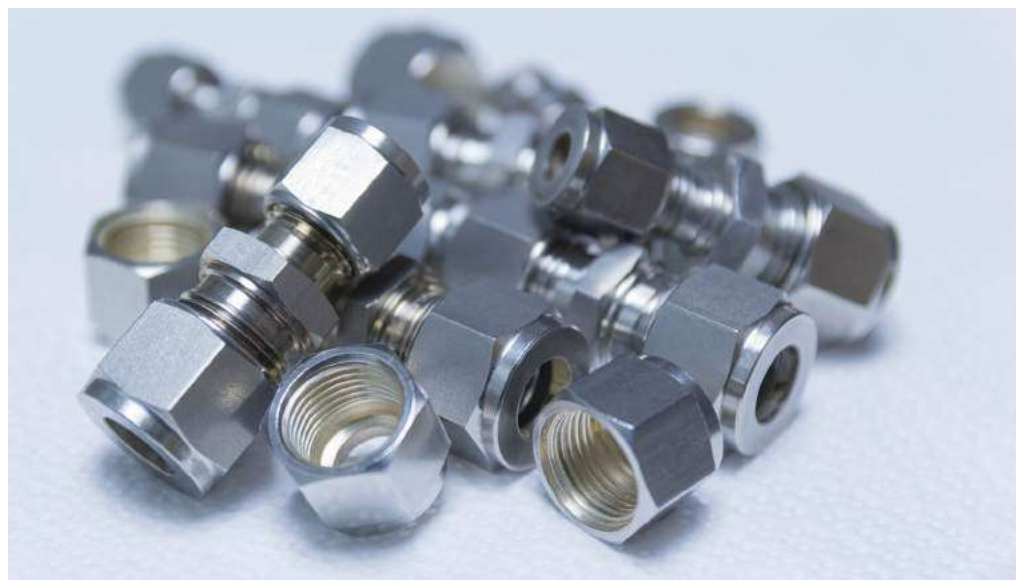
Male Elbow

Female Elbow



SIZE

1/8" - 1/8"	TSMC22			TSEM22	
1/4" - 1/8"		TSFC42	TSUR42		
1/4" - 1/4"	TSMC44	TSFC44		TSEM44	TSEF44
1/4" - 3/8"	TSMC46				
1/4" - 1/2"	TSMC48				
3/8" - 1/4"	TSMC64		TSUR64	TSEM64	
3/8" - 3/8"	TSMC66	TSFC66		TSEM66	TSEF66
3/8" - 1/2"	TSMC68				
1/2" - 1/4"			TSUR84		
1/2" - 3/8"	TSMC86		TSUR86		
1/2" - 1/2"	TSMC88	TSFC88		TSEM88	TSEF88
1/2" - 3/4"	TSMC812				
5/8" - 1/2"	TSMC108				
3/4" - 3/8"			TSUR126		
3/4" - 1/2"	TSMC128	TSFC128			
3/4" - 3/4"	TSMC1212	TSFC1212		TSEM1212	
3/4" - 1"	TSMC1216				
1" - 3/4"			TSUR1612		
1" - 1"	TSMC1616	TSFC1616		TSEM1616	



SCREWED BSP FITTINGS

REDUCING BUSH



REDUCING NIPPLES



SIZE		
1/4 - 1/8"	BSPRB008-0066	BSPRN008-0066
3/8 - 1/8"	BSPRB010-0066	BSPRN010-0066
3/8 - 1/4"	BSPRB010-0086	BSPRN010-0086
1/2 - 1/8"	BSPRB015-0066	BSPRN015-0066
1/2 - 1/4"	BSPRB015-0086	BSPRN015-0086
1/2 - 3/8"	BSPRB015-0106	BSPRN015-0106
3/4 - 1/4"	BSPRB020-0086	BSPRN020-0066
3/4 - 3/8"	BSPRB020-0106	BSPRN020-0086
3/4 - 1/2"	BSPRB020-0156	BSPRN020-0156
1 - 1/4"	BSPRB025-0086	BSPRN020-0086
1 - 3/8"	BSPRB025-0106	BSPRN025-0106
1 - 1/2"	BSPRB025-0156	BSPRN025-0156
1 - 3/4"	BSPRB025-0206	BSPRN025-0206

REDUCING BUSH



REDUCING NIPPLES



SIZE		
1 1/4 - 3/4"	BSPRB032-0206	BSPRN032-0156
1 1/4 - 1"	BSPRB032-0256	BSPRN032-0256
1 1/2 - 1/2"	BSPRB040-0156	BSPRN040-0156
1 1/2 - 3/4"	BSPRB040-0206	BSPRN040-0206
1 1/2 - 1"	BSPRB040-0256	BSPRN040-0256
1 1/2 - 1 1/4"	BSPRB040-0326	BSPRN040-0326
2 - 1"	BSPRB050-0256	BSPRN050-0256
2 - 1 1/2"	BSPRB050-0406	BSPRN050-0406
2 1/2" - 2"	BSPRB065-0506	BSPRN065-0506
3 - 2"	BSPRB080-0506	BSPRN080-0506
3 - 2 1/2"	BSPRB080-0656	BSPRN080-0656
4 - 3"	BSPRB100-0806	BSPRN100-0806

BARREL NIPPLE



HEX NIPPLES



BSP BLANK CAP



HEX PLUGS



BSP ELBOW



SOCKETS



NB	INCH						
6mm	1/8"	BSPBN0066	BSPHN0066		BSPPL0066	BSPEL0066	BSPS00066
8mm	1/4"	BSPBN0086	BSPHN0086	BSPCA0086	BSPPL0086	BSPEL0086	BSPS00086
10mm	3/8"	BSPBN0106	BSPHN0106	BSPCA0106	BSPPL0106	BSPEL0106	BSPS00106
15mm	1/2"	BSPBN0156	BSPHN0156	BSPCA0156	BSPPL0156	BSPEL0156	BSPS00156
20mm	3/4"	BSPBN0206	BSPHN0206	BSPCA0206	BSPPL0206	BSPEL0206	BSPS00206
25mm	1"	BSPBN0256	BSPHN0256	BSPCA0256	BSPPL0256	BSPEL0256	BSPS00256
32mm	1 1/4"	BSPBN0326	BSPHN0326	BSPCA0326	BSPPL0326	BSPEL0326	BSPS00326
40mm	1 1/2"	BSPBN0406	BSPHN0406	BSPCA0406	BSPPL0406	BSPEL0406	BSPS00406
50mm	2"	BSPBN0506	BSPHN0506	BSPCA0506	BSPPL0506	BSPEL0506	BSPS00506
65mm	2 1/2"	BSPBN0656	BSPHN0656	BSPCA0656	BSPPL0656	BSPEL0656	BSPS00656
80mm	3"	BSPBN0806	BSPHN0806	BSPCA0806	BSPPL0806	BSPEL0806	BSPS00806
100mm	4"	BSPBN1006	BSPHN1006	BSPCA1006	BSPPL1006	BSPEL1006	BSPS01006

BSP MALE /FEMALE BEND



BSP HOSETAIL



TOE NIPPLES



TEE



UNION



BSP/BSM MALE ADAPTOR



BSP TO TUBE ADAPTOR



NB	INCH						
6mm	1/8"			BSPTN0066	BSPTE0066	BSPUN0066	
8mm	1/4"	BSPEL0086MF	BSPHT0086	BSPTN0086	BSPTE0086	BSPUN0086	
10mm	3/8"	BSPEL0106MF	BSPHT0106	BSPTN0106	BSPTE0106	BSPUN0106	BSPTU0106
15mm	1/2"	BSPEL0156MF	BSPHT0156	BSPTN0156	BSPTE0156	BSPUN0156	BSPTU0156
20mm	3/4"	BSPEL0206MF	BSPHT0206	BSPTN0206	BSPTE0206	BSPUN0206	BSPTU0206
25mm	1"	BSPEL0256MF	BSPHT0256	BSPTN0256	BSPTE0256	BSPUN0256	9611307770 BSPTU0256
32mm	1 1/4"	BSPEL0326MF	BSPHT0326	BSPTN0326	BSPTE0326	BSPUN0326	BSPTU0326
40mm	1 1/2"	BSPEL0406MF	BSPHT0406	BSPTN0406	BSPTE0406	BSPUN0406	9611307771 BSPTU0406
50mm	2"	BSPEL0506MF	BSPHT0506	BSPTN0506	BSPTE0506	BSPUN0506	9611307772 BSPTU0506
65mm	2 1/2"			BSPTN0656	BSPTE0656	BSPUN0656	9611307773 BSPTU0656
80mm	3"			BSPTN0806	BSPTE0806	BSPUN0806	9611307774 BSPTU0806
100mm	4"			BSPTN1006	BSPTE1006	BSPUN1006	BSPTU1006

TUBE - FOOD GRADE AS 1528

POLISHED (std supply)
304s/s

POLISHED (std supply)
316s/s



SIZE

13mm / 1/2"		TUBEP0156
19mm / 3/4"		TUBEP0206
25mm / 1"	TUBEP0254	TUBEP0256
32mm / 1 1/4"	TUBEP0324	TUBEP0326
38mm / 1 1/2"	TUBEP0404	TUBEP0406
51mm / 2"	TUBEP0504	TUBEP0506
63mm / 2 1/2"	TUBEP0654	TUBEP0656
76mm / 3"	TUBEP0804	TUBEP0806
101mm / 4"	TUBEP1004	TUBEP1006
125mm / 5"	TUBEP1254	TUBEP1256
150mm / 6"	TUBEP1504	TUBEP1506



STRUCTURAL STEEL PARTS

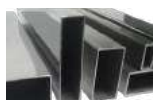
**SQUARE SECTION
TUBE**
POLISHED 304s/s **



SIZE

25 x 25 x 1.6	TUSQP0254
25 x 25 x 3	TUSQP025410G
32 x 32 x 1.6	TUSQP0324
32 x 32 x 3	TUSQP032410G
38 x 38 x 1.6	TUSQP0404
38 x 38 x 3	TUSQP040410G
50 x 50 x 1.6	TUSQP0504
50 x 50 x 3	TUSQP050410G
80 x 80 x 1.6	TUSQP0804
80 x 80 x 3	TUSQP080410G
100 x 100 x 3	TUSQP100410G
100 x 100 x 5	TUSQP10048G
150 x 150 x 5	TUSQP15048G

**RECTANGULAR
SECTION TUBE**
POLISHED 304s/s **

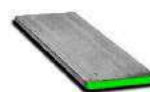


SIZE

50 x 25 x 3	TUSQP050X025X34
60 x 40 x 3	TUSQP060X040X34
80 x 40 x 3	TUSQP080X040X34
100 x 50 x 2	TUSQP100X050X24
100 x 50 x 3	TUSQP100X050X34
150 x 75 x 5	TUSQP150X075X54
150 x 100 x 5	TUSQP150X100X54

** 316s/s Available on request

FLAT BAR



SOLID ROUND BAR



ANGULAR SECTION



TUBE TOOLS

**TUBE CUTTING
BLOCK**



SIZE

25mm / 1"	9611981070
38mm / 1.5"	9611981071
51mm / 2"	9611981072
63mm / 2.5"	9611981073
76mm / 3"	9611981074
101mm / 4"	9611981075

**TUBE CUTTING
BLADES TO SUIT GF
CUTTERS**



SIZE

Tube 63mm 64 teeth
CSI035
(designed t/s dairy tube)

UNION SPANNERS

HEX SPANNERS
ALLOY

HEX SPANNERS
ALUMINIUM

ROUND NUT
SPANNERS

ROUND NUT
SPANNERS
(Articulated)



SIZE

10 - 20mm				9611901027
25mm / 1"	SPANN025ALLOY	SPANN025ALUM	3131709351	9611901028
38mm / 1.5"	SPANN040ALLOY	SPANN040ALUM	3131709351	9611901028
51mm / 2"	SPANN050ALLOY	SPANN050ALUM	3131709351	9611901029
63mm / 2.5"	SPANN065ALLOY	SPANN065ALUM	3131709351	9611901029
76mm / 3"	SPANN080ALLOY	SPANN080ALUM	3131709351	9611901029
101mm / 4"	SPANN100ALLOY	SPANN100ALUM		9611901029
125mm / 5"		SPANN125ALUM		9611901030
150mm / 6"		SPANN150ALUM		9611901030

TUBE CLAMPS AND BRACKET SYSTEMS

PLAIN
INTERLOCKING

BOSSED
INTERLOCKING

SADDLE DOUBLE
BOLTED

LONG TANG



SIZE

12mm / 1/2"			CLAMP0154S	
18mm / 3/4"	CLAMP0204		CLAMP0204S	CLAMP0204L
25mm / 1"	CLAMP0254	CLAMP0254B	CLAMP0254S	CLAMP0254L
32mm / 1.25"	CLAMP0324	CLAMP0324B	CLAMP0324S	CLAMP0324L
38mm / 1.5"	CLAMP0404	CLAMP0404B	CLAMP0404S	CLAMP0404L
51mm / 2"	CLAMP0504	CLAMP0504B	CLAMP0504S	CLAMP0504L
63mm / 2.5"	CLAMP0654	CLAMP0654B	CLAMP0654S	CLAMP0654L
76mm / 3"	CLAMP0804	CLAMP0804B	CLAMP0804S	CLAMP0804L
101mm / 4"	CLAMP1004	CLAMP1004B	CLAMP1004S	CLAMP1004L
125mm/5"			CLAMP1254S	CLAMP1254L
150mm/6"			CLAMP1504S	CLAMP1504L
200mm/8"			CLAMP2004S	
250mm/10"			CLAMP2504S	

OTHER CLAMPS ON REQUEST

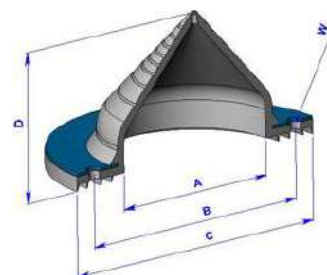




PIPETITE® STANDARD



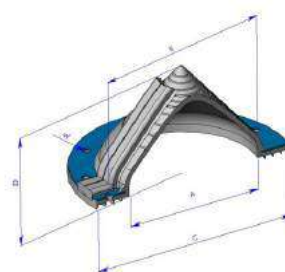
CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)	W (mm)
PT 0-35	0 - 25	30	57	70	52	6,2
PT 0-65	0 - 65	64	91	106	60	6,2
PT 0-95	0 - 95	100	128	147	78	6,2
PT 70-125	70 - 135	140	168	187	64	6,2
PT 100-150	100 - 180	180	213	237	84	6,2



PIPETITE® REBOOT®



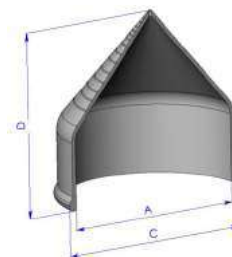
CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)	W (mm)
PT317120	0 - 65	64	91	106	60	6,2
PT317121	0 - 95	100	128	147	78	6,2
PT317122	70 - 135	140	168	187	64	6,2
PT317123	100 - 180	180	213	237	84	6,2
PT317128	125 - 275	280	313	337	137	6,2
PT317124	165 - 380	434	467	490	200	6,2



PIPE N PIPE



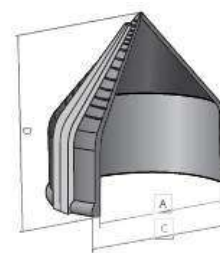
CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)	W (mm)
	25 x 0 - 20					
	65 x 0 - 50					
PT319010	100 x 0 - 75	90		102		112
PT319011	150 x 0 - 135	141		153		150
PT319012	200 x 0 - 180	197		209		191



PIPE N PIPE REBOOT®



CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)	W (mm)
PT319020	100 x 0 - 75	97		107		116



PIPETITE® ANCHORS



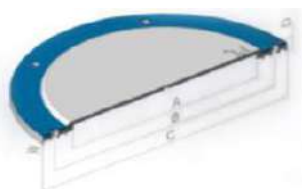
CODE	TO SUIT	JAR QTY
PT317127	Concrete	100
PT317150	Panel walls & Concrete (2 piece)	100
PTCUTTER	Tool for cutting pipetites	



- Pre drilled holes
- 316 s/s polished support ring
- Self Sealing ridge pattern
- Pre moulded cut lines
- Silicone rubber, FDA certified.
- -60°C to 260°C temp rated
- W/mK = 0.25 Thermal Conductivity



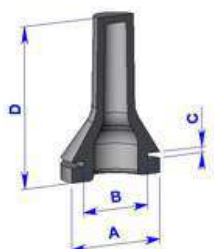
PIPETITE® FLAT



CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)	W (mm)
	0 - 25	30	57	70	10	6,2
PT317202	0 - 65	64	91	106	10	6,2
PT317203	0 - 95	100	128	147	10	6,2
PT317204	0 - 135	140	168	187	10	6,2



PIPETITE® GROMMET (PNEUMATICS)



CODE	TUBE SIZE	A (mm)	B (mm)	C (mm)	D (mm)
PT317135	6	22	16	1.2 - 3.0	33
PT317136	8	22	16	1.2 - 3.0	31
PT317137	10	22	16	1.2 - 3.0	32
PT317138	12	22	16	1.2 - 3.0	30



PIPETITE® MULTI GROMMET



CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)	W (mm)
PT317139P	0 - 25	31	56,7	70	43	6,2



PIPETITE® GROMMET



CODE	SIZE	A (mm)	B (mm)	C (mm)	D (mm)
PT317130	0 - 25	48	36	1.2 - 3.0	45
PT317131	0 - 65	82	70	1.2 - 3.0	57
PT317132	0 - 95	120	106	1.2 - 3.0	75
PT317133	70 - 135	160	146	1.2 - 3.0	61
PT314134	100 - 180	202	186	1.2 - 3.0	77



Before



After



Excessive thermal expansion and vibration caused traditional plate style covers to fall away from the wall, exposing the panel wall internals and external atmosphere to the inside of the process room.

Pipetite ReBoots installed Fully flexible and capable of absorbing the pipework movement without falling away from the wall. Self sealing ribbs mean no need for use of Silicone sealants.



DBG STANDARD

The safe, robust and quickly detachable connection between hose and tube for almost all liquids and gaseous media. Double-shutoff, single shutoff or straight-through design variants in sizes between DN4 and DN 80, also in pharmaceutically compatible quality (Ra<0.8µm, CIP and SIP)!



DBG CSP

Flat-face sterile coupling/non-drip Pharma
Conformity Ra < 0,8 µm CIP and SIP-capable



DBG SV

Flat-face tank coupling/non-drip Twistlock



ADAPTOR SOLUTIONS



CONNECTIVITY LOGIC



CUSTOMER-ORIENTED SOLUTIONS

Couplings for Covid-19 vaccine production
Customer Enquiry
Conceptual design
Offer to client
Production / assembly
Dispatch of components
5 Day turn around



To save even more time, connect up to 20 couplings simultaneously!

T-FIT[®]

INSULATION

Fit to perform. **Fit** to last



Unrivalled performance and minimal maintenance, year after year of a class-leading service life, make T-FIT[®] the most cost-effective pipe insulation solution for plant-wide installation in demanding, highly-controlled industrial, pharma and manufacturing environments.

T-FIT[®] Clean

T-FIT[®] Hygiene

T-FIT[®] Process

T-FIT® Process



PROPERTY	TEST STANDARD	TYPICAL VALUE
Material		ZOTEK® N B50 Closed Cell Nylon Foam
Service Temperature	See Notes Below*	-20 °C to +200 °C
Thermal Conductivity		
Mean temperature of 25 °C	ISO 8301	0.0361 W/m.K
Mean temperature of 170 °C		0.0485 W/m.K
Fungus Resistance	ASTM G21-15	Full test complete No signs after 28 days
Fire Certification		
Euroclass (Clad Product Only)	EN13501-1	E, E1
AS 1530	Gauge mm	Ignitability
	Spread of flame	Heat Evolved
		Smoke Dev
*25mm thickness result available upon request	5	0
		0
		3
Integral Cladding		Alu-PET Composite

*These are extreme temperatures. For continuous use or advice on product specification with respect to condensation control please contact your local T-FIT® representative.

PRODUCT INFORMATION

T-FIT® Process is manufactured from Zotefoams ZOTEK NB 50 closed cell Nylon foam.

The values provided in this Product Information Sheet represent data gathered from random samples of our production of T-FIT® Process foam and represent typical data. These are given to the best of our knowledge and should be considered as guidance only for selecting a suitable grade for a given application.



T-FIT PROCESS INSULATING STRAIGHT

ISO 1127. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
TFPS021106C000-9009	DN15	21,3
TFPS026106C000-9010	DN20	26,9
TFPS033106C000-9011	DN25	33,7
TFPS048106C000-9012	DN40	48,3
TFPS060106C000-9013	DN50	60,3
TFPS076106C000-9014	DN65	76,1
TFPS088106C000-9015	DN80	88,9

DIN11850. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
TFPS023D06C000-9004	DN20	23
TFPS029D06C000-9005	DN25	29
TFPS036D06C000-9006	DN32	35
TFPS041D06C000-9007	DN40	41
TFPS053D06C000-9008	DN50	53
TFPS070D06C000-9009	DN65	70

ASME BPE. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
	0.375"	9,53
TFPS012A06C000-9001	0.5"	12,7
TFPS019A06C000-9002	0.75"	19,05
TFPS025A06C000-9003	1.0"	25,4
TFPS038A06C000-9004	1.5"	38,1
TFPS050A06C000-9005	2.0"	50,8
TFPS063A06C000-9006	2.5"	63,5
TFPS076A06C000-9007	3.0"	76,2
TFPS101A06C000-9008	4.0"	101,6





PRODUCT INFORMATION

T-FIT® Hygiene is manufactured from Zotefoams ZOTEK® F43 HT closed cell PVDF foam.

The values provided in this Product Information Sheet represent data gathered from random samples of our production of T-FIT® Hygiene foam and represent typical data. These are given to the best of our knowledge and should be considered as guidance only for selecting a suitable grade for a given application.

T-FIT PRODUCTS

PROPERTY	TEST STANDARD	TYPICAL VALUE
Material		ZOTEK® F43 HT Closed Cell PVDF Foam
Service Temperature	See Notes Below*	-80 °C to +145 °C
Thermal Conductivity		
Mean temperature of 25 °C	ISO 8301	0.0344 W/m.K
Mean temperature of 50 °C		0.0370 W/m.K
Mean temperature of 80 °C		0.0405 W/m.K
Fire Certification		
Euroclass	EN13501-1	C – s2, d0
AS 1530	Gauge mm Ignitability Spread of flame Heat Evolved Smoke Dev	
	5 0 0 0 1	
	25 0 0 0 1	
Water Vapour Transmission	ISO 1663	7250, µ Value
Leachable Ions	ASTM C-871	Pass
Fungus Resistance	ASTM G21-15	Full test complete No signs after 28 days

*These are extreme temperatures. For continuous use or advice on product specification with respect to condensation control please contact your local T-FIT® representative.

T-FIT PROCESS INSULATING STRAIGHT



ASME BPE. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
TFHS012A06U000-9001	0.5"	12,7
TFHS019A06U000-9002	0.75"	19,05
TFHS025A06U000-9003	1.0"	25,4
TFHS038A06U000-9004	1.5"	38,1
TFHS050A06U000-9005	2.0"	50,8
TFHS063A06U000-9006	2.5"	63,5
TFHS076A06U000-9007	3.0"	76,2
TFHS101A06U000-9008	4.0"	101,6

ASME BPE. 12.70mm Thick

PRODUCT CODE	SIZE	OD MM
TFHS012A12U000-9001	0.5"	12,7
TFHS019A12U000-9002	0.75"	19,05
TFHS025A12U000-9003	1.0"	25,4
TFHS038A12U000-9004	1.5"	38,1
TFHS050A12U000-9005	2.0"	50,8
TFHS063A12U000-9006	2.5"	63,5
TFHS076A12U000-9007	3.0"	76,2
TFHS101A12U000-9008	4.0"	101,6



ISO 1127. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
TFHS021I06U000-9009	DN15	21,3
TFHS026I06U000-9010	DN20	26,9
TFHS033I06U000-9011	DN25	33,7
TFHS048I06U000-9012	DN40	48,3
TFHS060I06U000-9013	DN50	60,3
TFHS076I06U000-9014	DN65	76,1
TFHS088I06U000-9015	DN80	88,9

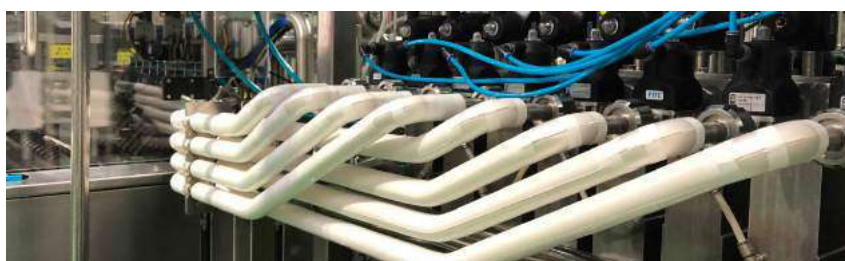
ISO 1127. 12.70mm Thick

PRODUCT CODE	SIZE	OD MM
TFHS021I12U000-9009	DN15	21,3
TFHS026I12U000-9010	DN20	26,9
TFHS033I12U000-9011	DN25	33,7
TFHS048I12U000-9012	DN40	48,3
TFHS060I12U000-9013	DN50	60,3
TFHS076I12U000-9014	DN65	76,1
TFHS088I12U000-9015	DN80	88,9



DIN11850. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
TFHS023D06U000-9004	DN20-23	23
TFHS029D06U000-9005	DN25-29	29
TFHS035D06U000-9006	DN32-36	35
TFHS041D06U000-9007	DN40-41	41
TFHS053D06U000-9008	DN50-53	53
TFHS070D06U000-9009	DN65-70	70



PROPERTY	TEST STANDARD	TYPICAL VALUE
Material		Manufactured from an FDA Compliant Kynar® based resin
Service Temperature	See Notes below*	-80 °C to +160 °C
Thermal Conductivity	Thermal Conductivity	Thermal Conductivity
Mean temperature of 0 °C		0.0314 W/m.K
Mean temperature of 25 °C	ISO 8301	0.0347 W/m.K
Mean temperature of 80 °C		0.0434 W/m.K
Fire Certification		
Euroclass	EN13501-1	B - s1, d0
UL723 / ASTM E84	Flaming Spread Index @ 25mm	5
	Smoke Developed Index @ 25mm	45
AS 1530	Gauge mm	Ignitability
	5	0
	25	0
		Spread of flame
		0
		Heat Evolved
		0
		Smoke Dev
		0/1
Water Vapour Transmission	ISO 1663	6500, µ Value
Outgassing	VDI 2083-P17	8.86 µg/g
ISO-AMC class	ISO 14644-8**	-10
Fungus Resistance	ASTM G21-15	Full test complete
		No signs after 28 days
Factory Mutual 4910 Cleanroom Materials Flammability Test Protocol		Specification Tested



*These are extreme temperatures. For continuous use or advice on product specification with respect to condensation control please contact your local T-FIT® representative.

**Based on independent testing and commentary, full report available on request.

PRODUCT INFORMATION

T-FIT® Clean is manufactured from Zotefoams ZOTEK® F42 HT LS fine, closed cell foam, the only foam product to be specification tested to FM4910 Clean Room Materials Protocol. The values provided in this Product Information Sheet represent data gathered from random samples of our production of T-FIT® Clean foam and represent typical data. These are given to the best of our knowledge and should be considered as guidance only for selecting a suitable grade for a given application.

T-FIT CLEAN STRAIGHT

ISO 1127. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK06381-EU	DN6	6,35
ZAFCK06382-EU	DN8	9,53
ZAFCK06500	DN10	12,7
ZAFCK06501	DN15	19,05
ZAFCK06502	DN20	25,4
ZAFCK06457	DN25	38,1
ZAFCK06503	DN32	50,8
ZAFCK06564	DN40	63,5
ZAFCK06835	DN50	76,2
ZAFCK06388-EU	DN65	88,9
ZAFCK06525	DN80	101,6

DIN11850. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK06381-D	DN8	10
ZAFCK06382-D	DN10	13
ZAFCK06383-D	DN15	19
ZAFCK06888	DN20	23
ZAFCK06889	DN25	29
ZAFCK06890	DN32	35
ZAFCK06503-D	DN40	41
ZAFCK06891	DN50	53
ZAFCK06297	DN65	70
ZAFCK06892	DN80	85

ASME BPE. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK99930	1/4"	6,35
ZAFCK06381	3/8"	9,53
ZAFCK06382	1/2"	12,7
ZAFCK06383	3/4"	19,05
ZAFCK06384	1"	25,4
ZAFCK06385	1 1/2"	38,1
ZAFCK06386	2"	50,8
ZAFCK06387	2 1/2"	63,5
ZAFCK06388	3"	76,2
ZAFCK06787	3 1/2"	88,9
ZAFCK06522	4"	101,6

T-FIT CLEAN ELBOW

ISO 1127. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK05880-EU	DN6	6,35
ZAFCK05814-EU	DN8	9,53
ZAFCK06512	DN10	12,7
ZAFCK06513	DN15	19,05
ZAFCK06582	DN20	25,4
ZAFCK06515	DN25	38,1
ZAFCK06516	DN32	50,8
ZAFCK06517	DN40	63,5
ZAFCK06518	DN50	76,2
ZAFCK05899-EU	DN65	88,9
ZAFCK06816	DN80	101,6

DIN11850. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK05880-D	DN8	10
ZAFCK05814-D	DN10	13
ZAFCK05815-D	DN15	19
ZAFCK06874	DN20	23
ZAFCK06875	DN25	29
ZAFCK06876	DN32	35
ZAFCK06516-D	DN40	41
ZAFCK06877	DN50	53
ZAFCK05238	DN65	70
ZAFCK06878-D	DN80	85

ASME BPE. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK05880	3/8"	9,53
ZAFCK05814	1/2"	12,7
ZAFCK05815	3/4"	19,05
ZAFCK05816	1"	25,4
ZAFCK05615	1 1/2"	38,1
ZAFCK05616	2"	50,8
ZAFCK05898	2 1/2"	63,5
ZAFCK05899	3"	76,2
ZAFCK06878	3 1/2"	88,9
ZAFCK06523	4"	101,6

T-FIT CLEAN TEE PIECES

ASME BPE. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK05900	3/8"	9,53
ZAFCK05743	1/2"	12,7
ZAFCK05744	3/4"	19,05
ZAFCK05745	1"	25,4
ZAFCK05746	1 1/2"	38,1
ZAFCK05747	2"	50,8
ZAFCK05901	2 1/2"	63,5
ZAFCK05902	3"	76,2

DIN11850. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK05900-D	DN8	10
ZAFCK05743-D	DN10	13
ZAFCK05744-D	DN15	19
ZAFCK06879	DN20	23
ZAFCK06880	DN25	29
ZAFCK06881	DN32	35
ZAFCK06509-D	DN40	41
ZAFCK06882	DN50	53
ZAFCK06883	DN65	70

ISO 1127. 6.35mm Thick

PRODUCT CODE	SIZE	OD MM
ZAFCK05900-EU	DN6	6,35
ZAFCK05743-EU	DN8	9,53
ZAFCK06506	DN10	12,7
ZAFCK06507	DN15	19,05
ZAFCK06583	DN20	25,4
ZAFCK06508	DN25	38,1
ZAFCK06509	DN32	50,8
ZAFCK06510	DN40	63,5
ZAFCK06511	DN50	76,2
ZAFCK05902-EU	DN65	88,9

Process Tape (Silver Foil)

PRODUCT CODE	LENGTH	WIDTH
2TFPALU	50m	25mm

PVDF Adhesive Tape (Tee Clean & Hygiene)

PRODUCT CODE	LENGTH	WIDTH
ZAXX9164	54.8m	25.4mm

This adhesive tape product is designed specifically for T-FIT® Installations. Comprised of a PVDF polymer film and a high-performance pressure sensitive adhesive. Especially designed for chemical and flammability resistance.

Installation Tool Box



Recommended Sealant Silirub 2/S



FOR DEMANDING HIGHLY-CONTROLLED ENVIRONMENTS
ROBUST AND DURABLE

ODOUR-FREE,
NON-SHEDDING,
NON-TOXIC MATERIAL
NO VOCs



LOW LIFETIME COST OF OWNERSHIP
UP TO 10-YEAR REFIT INTERVALS

RESISTS MOISTURE AND BACTERIA GROWTH
ELIMINATING CONTAMINATION

COMPACT PROFILE
QUICK AND EASY INSTALLATION



LKB BUTTERFLY VALVES



LKB



	304 s/s	316 s/s	316 s/s	316 s/s	316 s/s	316 s/s
SIZE	EPDM	EPDM	HNBR	SILICONE	VITON	PFA
25mm / 1"	9611444500	9611444501	9612650206	9611442191	9611444581	Not Available
38mm / 1.5"	9611444510	9611444511	9612650207	9611442211	9611444591	9612943214
51mm / 2"	9611444520	9611444521	9612650208	9611442221	9611444601	9612943215
63mm / 2.5"	9611444530	9611444531	9612650209	9611442231	9611444611	9612943216
76mm / 3"	9611444540	9611444541	9612650210	9611442241	9611444621	9612943217
101mm / 4"	9611414550	9611414551	9612650211	9611412261	9611414631	9612943218
125mm / 5"	9612075045**	9612075046**	9613419017**	9612075044**	9612075048**	Not Available
152mm / 6"	9611414571	9611414572	9612935204	9612935202	9611414652	Not Available

** Available in Metric DN dimensions only

LKB-F



	304 s/s	316 s/s	316 s/s	316 s/s	316 s/s
SIZE	EPDM	EPDM	HNBR	SILICONE	VITON
25mm / 1"	9612400031	9612402731	9612402761	9612402741	9612402751
38mm / 1.5"	9612400032	9612402732	9612402762	9612402742	9612402752
51mm / 2"	9612400033	9612402733	9612402763	9612402743	9612402753
63mm / 2.5"	9612400034	9612402734	9612402764	9612402744	9612402754
76mm / 3"	9612400035	9612402735	9612402765	9612402745	9612402755
101mm / 4"	9612400036	9612402736	9612402766	9612402746	9612402756
125mm / 5"	9612400008**	9612402708**	Not Available	9612402718**	9612402728**
152mm / 6"	9612400009**	9612402709**	Not Available	9612402719**	9612402729**

** Available in Metric DN dimensions only

LKB CLAMP



	304 s/s	316 s/s
SIZE	EPDM	EPDM
25mm / 1"	9611444905	9611445155
38mm / 1.5"	9611444915	9611445165
51mm / 2"	9611444925	9611445175
63mm / 2.5"	9611444935	9611445185
76mm / 3"	9611444945	9611445195
101mm / 4"	9611414955	9611415205
125mm / 5"	Not Available	Not Available
152mm / 6"	9613434441	9613434444

LKB ULTRAPURE CLAMP



	ASME BPE. Ra 0.5um		ASME BPE. Ra 0.4um EP	
SIZE	EPDM	VITON	EPDM	VITON
25mm / 1"	9613858301	9614051913	9613858207	9614051907
38mm / 1.5"	9613858302	9614051914	9613858208	9614051908
51mm / 2"	9613858303	9614051915	9613312209	9614051909
63mm / 2.5"	9613858304	9614051916	9613039210	9614051910
76mm / 3"	9613858305	9614051917	9612766211	9614051911
101mm / 4"	9613858306	9614051918	9612493212	9614051912

SEALS



USP Class IV & FDA certification
Ultrapure valves supplied with Q Doc.

LKB ULTRAPURE



	ASME BPE. Ra 0.5um		ASME BPE. Ra 0.4um EP	
SIZE	EPDM	VITON	EPDM	VITON
25mm / 1"	9613858201	9614051901	9613858207	9614051907
38mm / 1.5"	9613858202	9614051902	9613858208	9614051908
51mm / 2"	9613858203	9614051903	9613858209	9614051909
63mm / 2.5"	9613858204	9614051904	9613858210	9614051910
76mm / 3"	9613858205	9614051905	9613858211	9614051911
101mm / 4"	9613858206	9614051906	9613858212	9614051912



BUTTERFLY VALVE HANDLES

	LKB Handle 2 Position	LKB Handle 4 Position	LKB Regulating handle 90 Deg	LKB Handle 2 Position to suit indication unit	LKB Multi Position handle Short (150mm)	LKB Multi Position handle Long (200mm)
SIZE						
25mm / 1"	9612045001	9612045002	9612047401	9612047501	9612592804	
38mm / 1.5"	9612045001	9612045002	9612047401	9612047501	9612592804	
51mm / 2"	9612045001	9612045002	9612047401	9612047501	9612592804	
63mm / 2.5"	9612045001	9612045002	9612047401	9612047501	9612592804	
76mm / 3"	9612045101	9612045102	9612047402	9612047502	9612592805	
101mm / 4"	9612045901	9612045902	9612047403	9612047503	9612592806	9612592803
125mm / 5"		9612078201				
150mm / 6"		9612079101				

ACTUATOR MOUNTING BRACKETS

	MOUNTING BRACKET t/s Ø85mm Actuator	MOUNTING BRACKET t/s Ø133mm Actuator	MOUNTING BRACKET t/s Unique Control actuator
SIZE			
25 - 63mm	9611416470		9614090101
76 - 101mm	9611416480		9614090103
150mm	9611416640	9612285301 9612285401	9614090104

QUARTER TURN ACTUATORS

LKLA



	85mm Dia LKLA			133mm Dia LKLA		
SIZE	N/C	N/O	AIR/AIR	N/C	N/O	AIR/AIR
25-63mm	9611416301	9611416304	9611417491			
76mm	9611416302	9611416305	9611417492			
101mm	9611416306	9611416307	9611417493	9612271306	9612271307	9612271308
125mm			9611417502	9612271311	9612271312	9612271313
150mm			9611417500	9612271316	9612271317	9612271318

LKLA-T



	85mm Dia LKLA			133mm Dia LKLA		
SIZE	N/C	N/O	AIR/AIR	N/C	N/O	AIR/AIR
25-63mm	9612194002	9612194005	9612194102			
76mm	9612194003	9612194006	9612194103			
101mm	9612194007	9612194008	9612194104	9612374906	9612374907	9612374908
125mm			9612194202	9612374911	9612374912	9612374913
150mm			9612194201	9612374916	9612374917	9612374918

UNIQUE CONTROL Act.



FUNCTION

	Digital 24V DC	AS-Interface v2.1, 31 node	AS-Interface v3.0, 62 node
C2 / NC	9614067209	9614067201	9614067221
C2 / NO	9614067210	9614067202	9614067222

* Actuator only. Valve supplied separately.

NON RETURN VALVES



**LKC-2 SANITARY
NRV 304 s/s**



**LKC-2 SANITARY
NRV 316 s/s**



**LKC-Ultra Pure NRV
316 s/s c/w Q Doc.
(3.1B) 0.8um in/out**

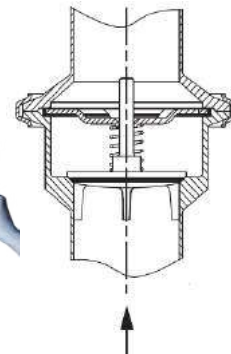


**LKC-Ultra Pure NRV
316L s/s c/w Q Doc (3.1B)
0.5um in/0.8um out**



SIZE

25mm / 1"	9612220001	9612220007	9613484301	9613481901
38mm / 1.5"	9612220002	9612220008	9613484302	9613481902
51mm / 2"	9612220003	9612220009	9613484303	9613481903
63mm / 2.5"	9612220004	9612220010	9613484304	9613481904
76mm / 3"	9612220005	9612220011	9613484305	9613481905
101mm / 4"	9612220006	9612220012	9613484306	9613481906



SPRING FREE NON RETURN VALVES

**EDF NON RETURN
VALVE**



SIZE ASME BPE

12mm / 1/2"	E1 01-2TT1610MMN1
20mm / 3/4"	E1 03-4TT1610MMN1
25mm / 1"	E1 01-0TT1610MMN1
38mm / 1.5"	E1 11-2TT1610MMN1
51mm / 2"	E1 02-0TT1610MMN1
63mm / 2.5"	E1 21-2TT1610MMN1
76mm / 3"	E1 03-0TT1610MMN1
101mm / 4"	E1 04-0TT1610MMN1



MATERIALS

Body valve/Flanges : AISI304, **AISI316L***
Shutter : **DUPLEX**

SURFACE FINISHING

Internal : $Ra \leq 0.4EP$, $Ra \leq 0.4$, $Ra \leq 0.8EP$, **$Ra \leq 0.8*$**
External : $Ra \leq 0.4EP$, $Ra \leq 0.4$, $Ra \leq 0.8EP$, $Ra \leq 0.8$, **$Ra \leq 3.2*$**

ELASTOMERS

EPDM, **NBR***, FPM (Viton), Silicone, FEP

TECHNICAL DATA

The differential pressure required to open the valve when installed in a vertical pipe is about 6 kPa (0.06bar). During operation the pressure difference to keep open the valve is approximately 3 kPa (0.02 bar)

Pressure Max : 1600kPa (16 Bar)
Temperature Max : 220 °C
Temperature Min : -10 °C

OPTIONAL CONNECTION STANDARDS

Welding : **DIN 11850***, DIN 11851, **ASME-BPE***, ISO 1127, SMS
Tri-Clamp : ASME-BPE, ISO1127, SMS, DIN32676

* Standard build option. All else on request.

**EDF NON RETURN
VALVE**



SIZE DIN11850

DN10	E10010TT1610MMN1
DN15	E10015TT1610MMN1
DN25	E10025TT1610MMN2
DN40	E10040TT1610MMN3
DN50	E10050TT1610MMN4
DN65	E10065TT1610MMN5
DN80	E10080TT1610MMN6
DN100	E10100TT1610MMN7

**Full PTFE Version
Suitable for corrosive and high
purity fluids**



**Self draining eccentric
tri-clamp version**



**Yew W Version
Clamped Body**



Pharmaball



In terms of the EC pressure equipment directive 97/23/EC, vacuum pressure relief valves are not considered as security devices and do not have any type of examination certificates.

4" valve with clamp connection, fitted with manual forced opening device

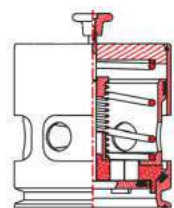
VACUUM

30 mbar

PRESSURE RELIEF

0.2 to 2 bar, according to spring

No jamming thanks to the PTFE plug and silicone seal



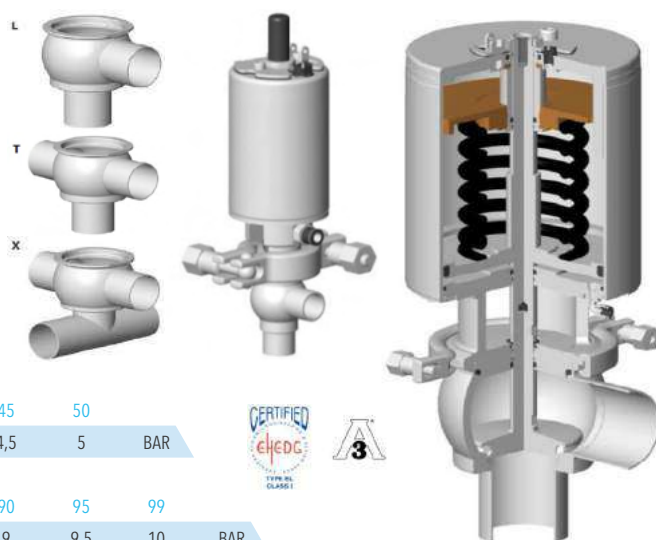
PRESSURE		2" CLAMP	2 1/2" CLAMP	4" CLAMP
BAR	PSI			
0,2	2,8	TU051A16102	TU063A16102	TU101A16102
0,5	7			TU101A16105
0,7	9,8	TU051A16107	TU063A16107	
1	14	TU051A16110	TU063A16110	TU101A16110
1,2	16,8			
1,3	18,2			TU101A16113
1,4	19,6	TU051A16114	TU063A16114	
1,7	23,8			TU101A16117
1,8	25,2	TU051A16118	TU063A16118	
2	28			TU101A16120
2,5	35	TU051A16125	TU063A16125	
2,75	38,5			TU101A16127
3	42			
VACUUM				
0,03	0,42	Not Variable	Not Variable	Not Variable

DCX3 ADJUSTABLE PRESSURE RELIEF VALVE WITH AIR OVERRIDE

	BODY TYPE		
	L	T	X
12mm / 1/2"	NU012K11100	NU012K21100	NU012K31100
19mm / 3/4"	NU019K11100	NU019K21100	NU019K31100
25mm / 1"	BU025K14100	BU025K24100	BU025K34100
38mm / 1.5"	BU038K14100	BU038K24100	BU038K34100
51mm / 2"	BU051K14100	BU051K24100	BU051K34100
63mm / 2.5"	BU063K14100	BU063K24100	BU063K34100
76mm / 3"	BU076K14100	BU076K24100	BU076K34100
101mm / 4"	BU101K14100	BU101K24100	BU101K34100

Set 00 Value with pressure code below

CODE	10	15	20	25	30	35	40	45	50	
Set Pressure	1	1,5	2	2,5	3	3,5	4	4,5	5	BAR
CODE	55	60	65	70	75	80	85	90	95	99
Set Pressure	5,5	6	6,5	7	7,5	8	8,5	9	9,5	10 BAR



PRESSURE & VACUUM RELIEF VALVE



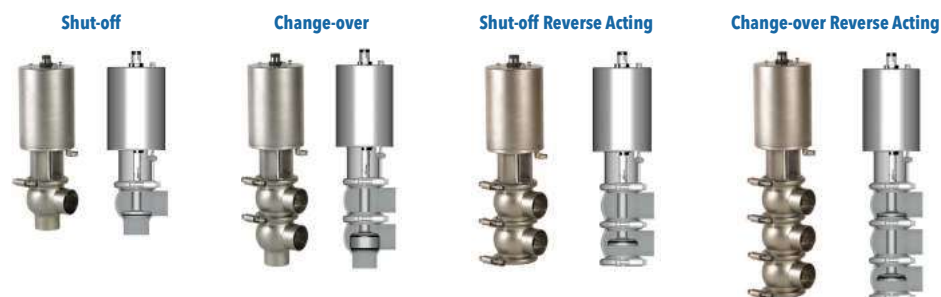
MAX FLOW	MODEL	CONNECTION	RELIEF METHOD	
130 hl/h	RV 130	ø1 1/4" BSP	Polyethylene ball	9612929163
400 hl/h	RV 400	ø1 1/4" BSP	Polyethylene ball	9612929162
400 hl/h	RV 400A	ø1 1/2" BSP	Polyethylene ball	9612929165
800 hl/h	RV 800	ø 2" BSP	Polyethylene ball	9612929164
300 hl/h	RV 300	ø60mm weld	Oil Bath	9612945853
800 hl/h	RV 800	ø102mm weld	Oil Bath	9612929164



SANITARY VALVES

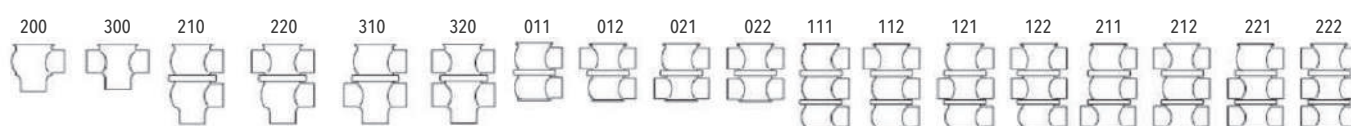


UNIQUE SSV



AVAILABLE IN SIZES

25mm, 38mm, 51mm, 63mm, 76mm, 101mm, 125mm, 150mm



TECHNICAL DATA

Max. Product Pressure : 1000 kPa (10 bar)
 (depending on valve specifications)
 Min. Product Pressure : Full Vacuum
 Temperature Range : -10C to +140C (EPDM)
 Air Pressure : 500 - 700 kPa (5 to 7 bar)

Standard Plug Setup



Aseptic Plug Setup



Tank Outlet Valves



Tangential Outlet Valves



Manually Operated/ Manual Regulating Valves



Y-Body Valves



UNIQUE SSSV

OPTIONS

Normally Open
 Normally Closed

SIZE RANGE

1/2" (12mm)
 3/4" (18mm)

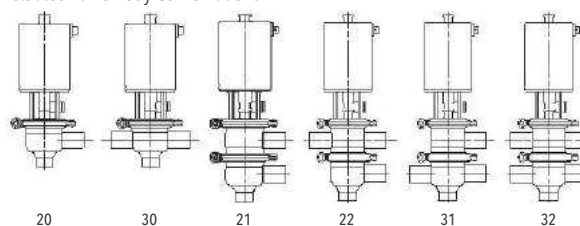
ELASTOMERS

EPDM (std), FPM, HNBR

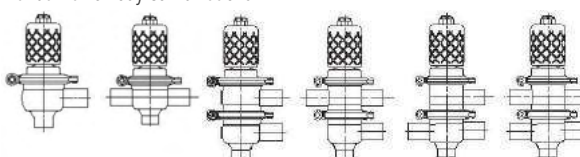
1/2" & 3/4" ACTUATED SMALL SINGLE SEAT VALVES



Actuated Valve Body Combinations



Manual Valve Body Combinations





SANITARY VALVES

LKAP 1" SINGLE SEAT VALVE



SIZE	CODE	BODY	POSITION	ELASTOMERS
25mm	9612413801	20	N/C	EPDM
25mm	9612413802	20	N/C	NBR
25mm	9612413803	20	N/C	EPDM
25mm	9612413804	20	N/C	NBR
25mm	9612413805	20	N/O	EPDM
25mm	9612413806	20	N/O	NBR

SBV SANITARY BALL VALVES

The Alfa Laval Sanitary Ball Valve (SBV) is a hygienic ball valve designed with a bore diameter the same size as the pipeline diameter. The full-bore design with zero flow restriction and minimum pressure drop makes the SBV the optimum choice to handle high-viscosity or particulate liquids. It is also ideal for use in pigging systems to prevent product waste and optimize plant performance.

SBV SANITARY BALL VALVE MANUAL



SBV SANITARY BALL VALVE ACTUATED



SBV SANITARY BALL VALVE ACTUATED Prepared for Thinktop



SIZE			
1"	9612644001	9612644013	9612644019
1 1/2"	9612644002	9612644014	9612644020
2"	9612644003	9612644015	9612644021
2 1/2"	9612644004	9612644016	9612644022
3"	9612644005	9612644017	9612644023
4"	9612644006	9612644018	9612644024



SCANDI BREW MINI FLOW VALVE

OPTIONS

Manual
Pneumatic Actuation

SIZE RANGE

6mm - 8mm Compression fittings

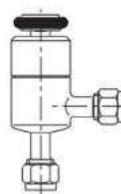
ELASTOMERS

EPDM (std), PTFE

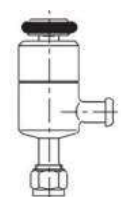
MAX PRODUCT PRESSURE

6 Bar

6 / 8mm SINGLE SEAT GAS & LIQUID VALVES



Drain valve with fittings



Drain valve with fittings/Clip-On



SANITARY REGULATING VALVES



SIZE	CODE	m3/Hr
38mm	*9614291601	11
38mm	9613320115	14
38mm	9613320116	44
51mm	9613320117	73
63mm	9613320118	106
76mm	9613320119	171
101mm	9613320120	246

UNIQUE SSV / SSV-RF
MANUAL REGULATING VALVE



*SSV-RF

SIZE	Kv value, m3/Hr
25mm	1, 1-5, 1-9, 2-7, 3-2, 6
38mm	14, 16, 25, 44
51mm	9, 34, 52, 75
63.5mm	27, 107
76.1mm	59, 101, 172
101.6mm	125, 164, 246

UNIQUE RV-ST
REGULATING VALVE



UNIQUE RV-P
ELECTRO PNEUMATIC
MODULATING VALVE
(n/c)



UNIQUE RV-P
ELECTRO PNEUMATIC
MODULATING VALVE
(n/o)



UNIQUE RV-P ELECTRO
PNEUMATIC ASEPTIC
MODULATING VALVE
(n/c)



UNIQUE RV-P ELECTRO
PNEUMATIC ASEPTIC
MODULATING VALVE
(n/o)



SIZE				
38mm Kv 0.5E	9615223111	9615223101	9615223311	9615223301
38mm Kv 1 E	9615223112	9615223102	9615223312	9615223302
38mm Kv 2 E	9615223113	9615223103	9615223313	9615223303
38mm Kv 4 E	9615223114	9615223104	9615223314	9615223304
38mm Kv 8 E	9615223115	9615223105	9615223315	9615223305
38mm Kv 16 E	9615223116	9615223106	9615223316	9615223306
51mm Kv 25	9010001806	8010001808		
51mm Kv 32 L	9615223117	9615223107	9615223317	9615223307
63mm Kv 40	8010001811	8010001812		
63mm Kv 64 L	9615223118	9615223108	9615223318	9615223308
76mm Kv 75 L	9615223119	9615223109	9615223319	9615223309
101mm Kv 110 L	9615223120	9615223110	9615223320	9615223310

UNIQUE RV-P SELECTION CHART

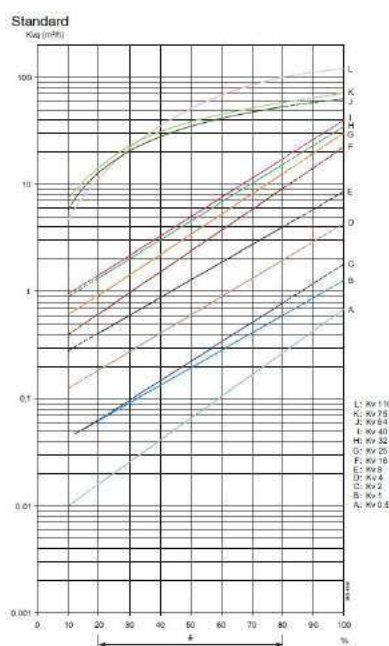
PRESSURE DROP CALCULATION

The Kv designation is the flow rate in m3/h at a pressure drop of 1 bar when the valve is fully open (water at 20°C or similar liquids). To select the Kv value it is necessary to calculate the Kvq value using the following formula:

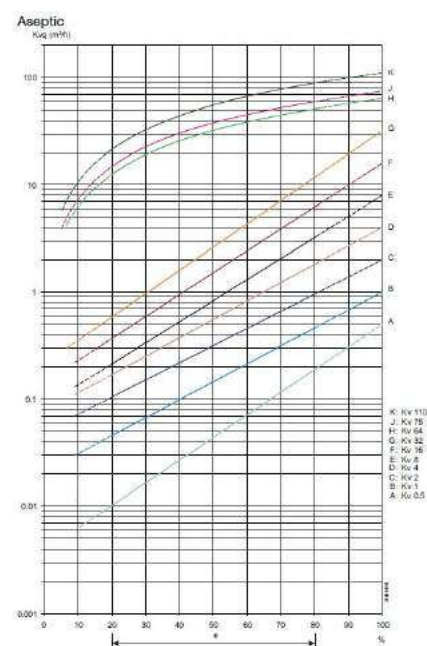
$$Kv_q = \frac{Q}{\sqrt{\Delta p}}$$

WHERE

Kvq : Kv Value at specific flow and specific pressure
Q : drop Flow Rate (m3/Hr)
ΔP : Pressure drop over valve (bar)



*Recommended working area





SANITARY REGULATING VALVES

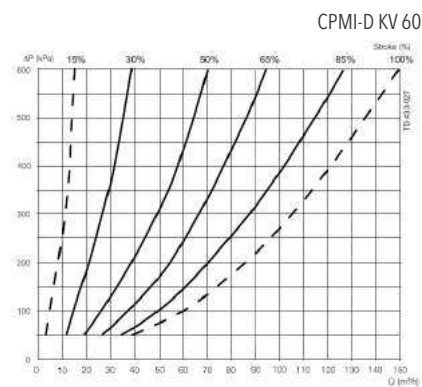
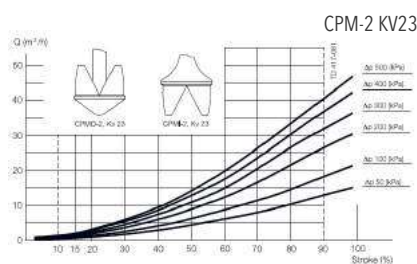
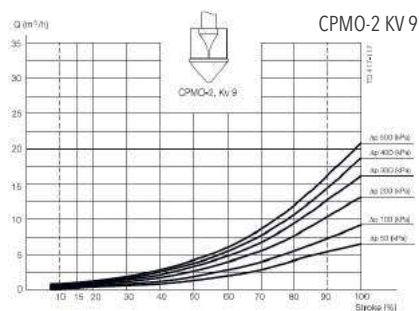
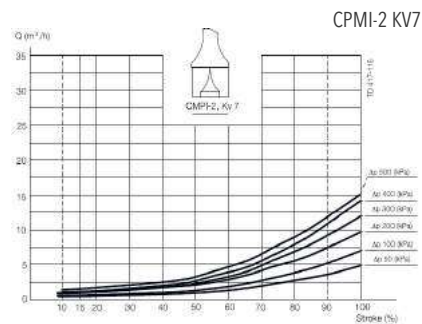
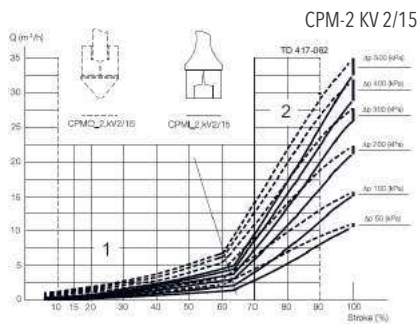
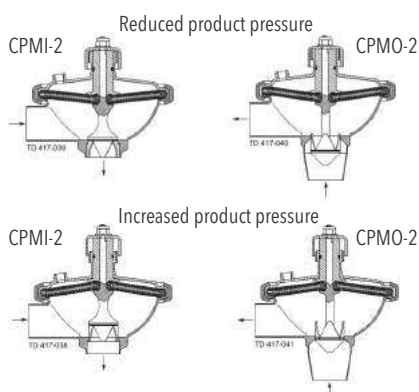
SIZE	CODE
Kv 23	9612305501
Kv 2 / 15	9612305503
Kv 7	9612305517
Kv 60	3135661411

CPM-I PRESSURE REGULATING VALVE



SIZE	CODE
Kv 23	9612305502
Kv 2 / 15	9612305504
Kv 9	9612305518

CPM-O PRESSURE REGULATING VALVE



SCANDI BREW CO2 REGULATING VALVES

The SCANDI BREW® CO2 House valve is to be used in combination with the Anti Vacuum Valve. The purpose of the valve is to control the working pressure in tanks during increased pressure.

SCANDI BREW CO2 House



SIZE	Pressure range
51mm	0.2-3 Bar
76mm	0.2-3 Bar

The Alfa Laval SB Pressure Exhaust Valve is a regulating valve that automatically reduces the working pressure in brewery, food, dairy and beverage process tanks as the pressure in the vessel increases.

SCANDI BREW Pressure Exhaust Valve



SIZE	Pressure range
38mm	1-4 Bar
51mm	0.5-4 Bar

Combined gas escape/supply valve to be used in tank top systems and other applications for easy gas flow, allowing venting as well as pressurizing of vessel through the valve. Partly-closed for CIP liquid to be cleanable and self-draining.

WORKING PRINCIPLE

The internal polypropylene valve body is force opened by a stainless steel spring, thus allowing full gas capacity through the valve in both directions. By introducing CIP flow against the spring force, the internal valve body will be moved to a closed position.

The CIP liquid will close the valve but a special drilling of the valve body ensures cleaning of all valve parts. Depending on valve size, this CIP flow is approx. 800-900 l/h.

SIZE	Flow (m3/hr)
DN25 / 1"	25
DN40 / 1.5"	50
DN50 / 2"	150
DN65 / 2.5"	250
DN80 / 3"	450
DN100 / 4"	600

SCANDI BREW SELF CLEANING CO2 VALVE



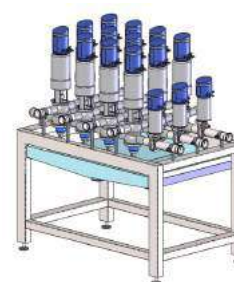
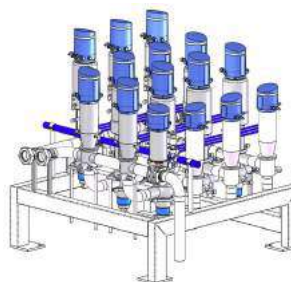
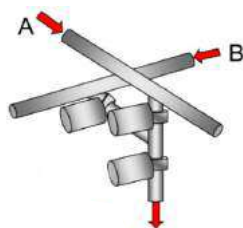
MIXPROOF PRINCIPLES



Flow Plate



Butterfly Valves



DOUBLE BLOCK AND BLEED



Mixproof Valve



Single Seat Valves



SMP-BC DOUBLE SEAL MIXPROOF VALVES

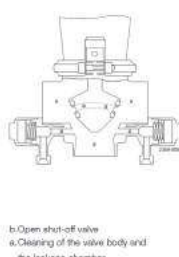
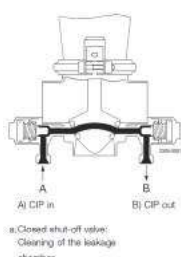
THE BASIC CHOICE IN MIXPROOF VALVES

SMP-BC is a sanitary pneumatic seat valve, designed for safety and leak detection when two different products flow through only one valve. The valve is often used as a part in CIP return lines or other systems not experiencing pressure spikes offering leakage detection for greater safety.

WORKING PRINCIPLE

- SMP-BC is remote-controlled by means of compressed air. The valve is a normally closed (NC) valve.
- The valve is fitted with two small pneumatic normally open (NO) valves, a detecting valve and a CIP-valve.
- The valve plug (the upper plug in a change-over valve) has two seals, forming a leakage chamber under atmospheric pressure between them. Leaking product flows into the leakage chamber and is discharged through the detecting valve. SMP-BC can be cleaned by CIP by supplying compressed air to the actuator (see fig. 1). During cleaning of the valve, flow pattern against the closing direction of the valve plug makes SMP-BC insensitive to water hammer.

**SMP-BCA ASEPTIC
Version Available**



SIZE	20	30
38mm	9612364801	9612364811
51mm	9612364802	9612364812
63mm	9612364803	9612364813
76mm	9612364804	9612364814
101mm	9612364805	9612364815





UNIQUE MIXPROOF VALVES

The Unique Mixproof Valve is designed with user flexibility in mind. The customer can choose additional options as required individually; for example higher hygiene demands or higher resistance against physically tough conditions.

Unique is remote-controlled by means of compressed air. The valve is a normally closed (NC) valve.

The valve has two independent plug seals, forming a leakage chamber between them under atmospheric pressure during every working condition. In case of rare accidental leaking of product, this will flow into the leakage chamber and be discharged through the leakage outlet. When the valve is open, the leakage chamber is closed. The product can then flow from one line to the other.

The valve can be cleaned and water hammer protected to any level according to the needs in the specific process (see next page). There is virtually no spillage of product when operating the valve.

The Unique Mixproof Valve from Alfa Laval is the latest in Mixproof technology. Offering complete process flexibility, built to your requirements.

AVAILABLE IN SIZES

38mm, 51mm, 63mm, 76mm, 101mm, 125mm, 150mm

MIXED BODY SIZES

i.e.: 101mm lower body / 51mm Upper body

BALANCED OR UN-BALANCED PLUG

You can choose to have a balanced lower plug

You can choose to have a balanced Upper plug

You can choose to have Both Upper & Lower plugs balanced. Or both Unbalanced.

INDEPENDENT SEAT LIFT

You can choose to have seat lift of the Lower plug only

You can choose to have seat lift of the Upper plug only

You can choose to have seat lift of both Upper & Lower plugs. Or no seat lift at all.

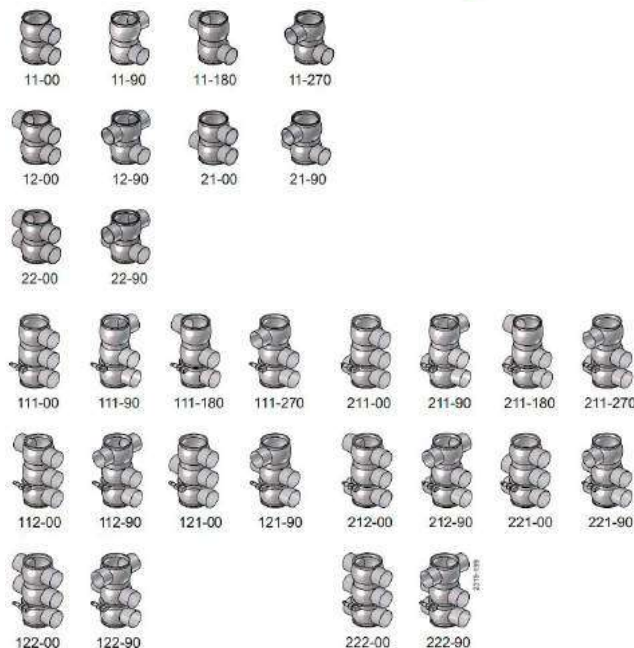
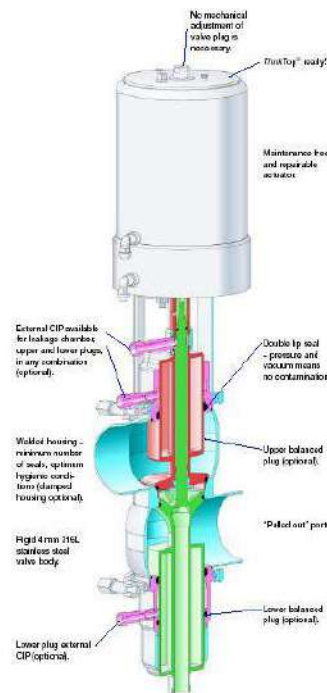
SPIRAL CLEAN

The unique Spiral clean system can be incorporated on the upper or lower plugs

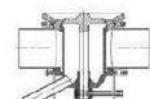
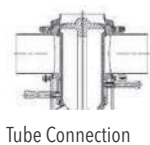
It can also be incorporated between the plugs in the leakage chamber.

ELASTOMERS OPTIONS

EPDM, FPM, HNBR, NBR



TANK VALVE (Unique HT)



ULTRAPURE MIXPROOF VALVE (Unique HT)



LARGE PARTICULATE VALVE (Unique LP)



Upto 45mm pieces
or high viscosity.

ASEPTIC MIXPROOF VALVE



DIAPHRAGM VALVES



The Alfa Laval Unique DV-ST UltraPure Diaphragm Valve is an aseptic diaphragm valve used to shut off, divert and/or regulate the flow of fluids through hygienic, high-purity and aseptic processing lines.

The Alfa Laval Unique DV-ST UltraPure diaphragm valve has a modular design that consists of a valve body, diaphragm, and either a handle for manual operation or an actuator for pneumatic operation. It can be designed to suit any application.

The DV-ST UltraPure diaphragm valve can be fitted with sensing and control units from an extensive range. Options include control units that suit AS-Interface, IO-Link and digital operating platforms.

The diaphragms are available as soft elastomer (EPDM) as well as hard elastomers (PTFE/EPDM and TFM/EPDM).

Alfa Laval DV-ST UltraPure valve bodies are available in cast, forged, and block options to suit the most demanding applications. A choice of surface finishes and connection types are also available. For critical applications with corrosive media, special alloys such as Hastelloy, duplex, and AL-6XN materials in block design are available upon request.



DESCRIPTION	Temperature recommendation °C			Documentation			AVAILABLE SIZES	AVAILABLE DIAPHRAGM CONNECTIONS		
	MIN	MAX	Max Steam	FDA	USP	TSE		DN 8 - 20	DN 25 - 100	
EPDM	-40°C	130°C	150°C	X	X	X	DN 8 - 100			
PTFE/EPDM	-5°C	175°C	150°C	X	X	X	DN 15 - 100			DN 15 - 100
TFM/EPDM	-5°C	175°C	150°C	X	X	X	DN 8 - 100	DN 8 - 10		DN 15 - 100



Alfa Laval ThinkTop® Rethought



- Intuitive & Fast

Auto set-up feature – automatically recognizes and selects the valve

- Smart & Adaptable

360 indication – clear LED visible from any direction

- Durable & Reliable

Stronger and simpler mounting arrangement

- Aesthetic Design

No cover screws – improving cleanability



www.alfalaval.com/thinktop

The compact Alfa Laval ThinkTop V50 and V70 are the second-generation of the leading sensing and control units for hygienic valves. It ensures unmatched control of all Alfa Laval valves used in the dairy, food, beverage, brewery and pharmaceutical industries.

Intuitive, intelligent hygienic valve control.

- Fast, intuitive setup takes place in seconds
- Smart control with 24/7 self-diagnostics
- 360° LED visual status indication, visible from any direction
- Built-to-last waterproof design withstands vibration and thermal expansion
- Fastest ever burst seat cleaning reduces water consumption by up to 90%

THINKTOP® V50



**ThinkTop V50
Digital PNP
(6mm - 24 VDC)**

CODE	SOL	TYPE	MAIN ENTRY
9615400401	0		Cable gland
9615400403	1	3/2	Cable gland
9615400402	0		M12 plug
9615400404	1	3/2	M12 plug

**ThinkTop V50
AS-Interface v2.1, 31 node
(6mm - 29.5 - 31.6 VDC)**

CODE	SOL	TYPE	MAIN ENTRY
9615400407	0		Cable gland
9615400409	1	3/2	Cable gland
9615400408	0		M12 plug
9615400410	1	3/2	M12 plug

**ThinkTop V50
AS-Interface v3.0, 62 node
(6mm - 29.5 - 31.6 VDC)**

CODE	SOL	TYPE	MAIN ENTRY
9615400413	0		Cable gland
9615400415	1	3/2	Cable gland
9615400414	0		M12 plug
9615400416	1	3/2	M12 plug

**ThinkTop V50
Digital IO-Link
(6mm - 24 VDC)**

CODE	SOL	TYPE	MAIN ENTRY
9615400419	0		M12 plug
9615400420	1	3/2	M12 plug

THINKTOP® V70



**ThinkTop V70
Digital PNP
(6mm - 24 VDC)**

CODE	SOL	TYPE	MAIN ENTRY
9615400001	0		Cable gland
9615400003	1	3/2	Cable gland
9615400007	2	3/2	Cable gland
9615400011	3	3/2	Cable gland
9615400015	1	5/2	Cable gland
9615400002	0		M12 plug
9615400004	1	3/2	M12 plug
9615400008	2	3/2	M12 plug
9615400012	3	3/2	M12 plug
9615400016	1	5/2	M12 plug

**ThinkTop V70
AS-Interface v2.1, 31 node
(6mm - 29.5 - 31.6 VDC)**

CODE	SOL	TYPE	MAIN ENTRY
9615400101	0		Cable gland
9615400103	1	3/2	Cable gland
9615400107	2	3/2	Cable gland
9615400111	3	3/2	Cable gland
9615400115	1	5/2	Cable gland
9615400102	0		M12 plug
9615400104	1	3/2	M12 plug
9615400108	2	3/2	M12 plug
9615400112	3	3/2	M12 plug
9615400116	1	5/2	M12 plug



THINKTOP®

THINKTOP® V70

CODE	SOL	TYPE	MAIN ENTRY
9615400201	0		Cable gland
9615400203	1	3/2	Cable gland
9615400207	2	3/2	Cable gland
9615400211	3	3/2	Cable gland
9615400215	1	5/2	Cable gland
9615400202	0		M12 plug
9615400204	1	3/2	M12 plug
9615400208	2	3/2	M12 plug
9615400212	3	3/2	M12 plug
9615400216	1	5/2	M12 plug

ThinkTop V70
AS-Interface v3.0, 62 node
(6mm - 29.5 - 31.6 VDC)



CODE	SOL	TYPE	MAIN ENTRY
9615400301	0		Cable gland
9615400302	1	3/2	Cable gland
9615400304	2	3/2	Cable gland
9615400306	3	3/2	Cable gland
9615400308	1	5/2	Cable gland

ThinkTop V70
Digital IO-Link
(6mm - 24 VDC)

INDITOP®



INDI Top 8-30VDC/AC, PNP/NPN.
2 position feedback

CODE	CABLE	PNP/NPN
9613418101	5m	PNP/NPN
9613418102	10m	PNP/NPN



INDI Top 8-30VDC/AC, PNP or NPN.
M12 Plug

CODE	CABLE	PNP/NPN
9613418103	0.5m M12 Plug	NPN
9613418104	0.5m M12 Plug	PNP

BRACKET SYSTEMS FOR INDICATION SENSORS

Thinktop Adaptor for SSSV



CODE	SIZE
9612947601	12.5-19mm

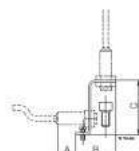
Bracket system for SMP-SC, SMP-BC, SMP-BCA, SMP-TO, LKLA-T (LKB), Koltek MH, SBV and Unique.



CODE	SENSOR
9612411202	12mm

*Sensor not included

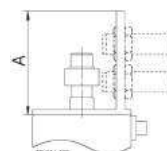
LKAP Bracket system



CODE	SENSOR
9612498901	12mm

*Sensor not included

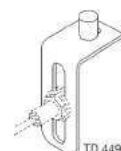
SSSV Bracket system



CODE	SENSOR
9612947703	12mm

*Sensor not included

Bracket system for external sensor on Unique

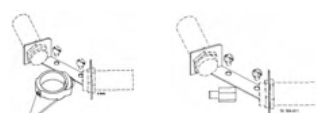


CODE	SENSOR
9613095503	12mm

*Sensor not included

LATERALLY MOUNTED UNIT FOR LKLA (LKB) / HANDLE 1.1

Bracket system to suit inductive prox sensors
12mm sensors* 18mm Sensors*



SIZE		
25-101mm (85 Actuator)	9611417764	9611417765
101-150mm (85 Actuator)	9611417767	9611417768
101-150mm (133 Actuator)	9612552901	9615552902

*Sensor not included

Inductive Prox Switch
10-36 VDC PNP



SIZE	
25 - 101mm (85 Actuator)	9611995750
101-150mm (133 Actuator)	9611995748



Complete positioner 8694 without display

CODE	VALVE TYPE
9611995266	SSV Valve
9611995267	LKLA-T



Complete positioner 8694 with display

CODE	VALVE TYPE
9611995268	SSV Valve
9611995269	LKLA-T

Positioner for single acting actuators only. LKLA-T 85 n/c and SSV actuators (except long stroke)

CONDITION MONITOR

The Alfa Laval CM monitors the operating condition of rotating equipment, such as pumps, mixers and agitators, used in hygienic process environments. Compact, easy to use and easy to install, it tracks equipment vibration, temperature and total run-time – three of the most widely used parameters for detecting and diagnosing equipment faults. This enables manufacturers in the dairy, food, beverage, home-personal care and pharmaceutical industries to protect critical assets, ensure process uptime, improve worker safety, reduce maintenance costs and gain competitive advantage.

Powering the Alfa Laval CM are equipment sensors that transmit data to a connected compatible mobile device for predictive maintenance analysis, thereby supporting decision-making with advanced diagnostics such as trend monitoring. Maintenance staff can check equipment vibration and temperature – either by visible notification on an LED indicator on the monitor or through an intuitive mobile app on a connected iOS or Android device within a 20-metre range during a periodic walk-around.

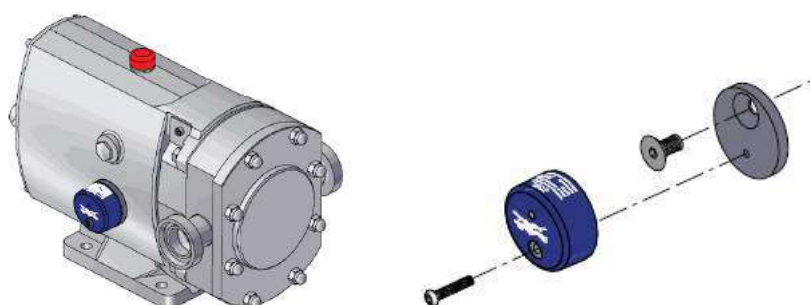
The Alfa Laval CM condition monitor is a quick and easy battery operated device, to attach to rotating equipment and detect any change in the equipment behaviour compared to the benchmark baseline on set-up. Providing users with easy, safe data via bluetooth to enable them to optimise process uptime, assist in maintenance scheduling and efficiency and reduce operating costs.

The Alfa Laval CM periodically measures the tri-axial vibration of the installed unit and the internal temperature storing 3 months of data for analysis, comparing it to the original baseline set-up values and pre-set warning and alarms, which if exceeded provide a visible indication via its LED and via the users mobile device.



CONNECTION	CODE
M6	8010005350
M8*	8010005350
M10*	8010005351
M12*	8010005352
M16*	8010005353

*Supplied with adaptor



To install the Alfa Laval Condition Monitor application, use a handheld device that operates with Android or iOS - Direct download via QR-code.



ELECTROMAGNETIC FLOW METER SYSTEMS



PD340 SERIES

The PD 340 Flow Transmitter is an electromagnetic precision meter for the volumetric measurement of liquids that are electrically conductive. The transmitter can be used in applications where a hygienic design is required. The rugged construction of the transmitter makes it suitable for installations where solid particles are present in the liquid.

FUNCTIONS

- Pulse and 4-20mA outputs
- Batch control; function
- Built-in PI flow controller
- Simple display connection. (PD210)
- P-Net IEC 61158 Fieldbus communication
- Two built-in counters for totalising the volume flow
- Inputs for temperature sensor and digital signal

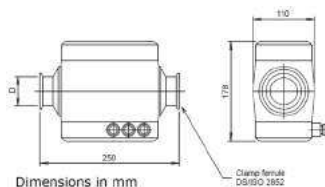


PD 210 Controller



PD 340- C102

SIZE	MAX FLOWRATE
C25 1"	8 m ³ /hr
C38 1 1/2"	20 m ³ /hr
C51 2"	40 m ³ /hr
C63 2 1/2"	80 m ³ /hr
C76 3"	120 m ³ /hr
C102 4"	200 m ³ /hr



Standard Version (2 pulse output)



Extended Version (current output, pulse output, P-Net interface)



Standard Version* (2 pulse output)



Extended Version* (current output, pulse output, P-Net interface)



Profibus DP Interface



SIZE	Standard Version (2 pulse output)	Extended Version (current output, pulse output, P-Net interface)	Standard Version* (2 pulse output)	Extended Version* (current output, pulse output, P-Net interface)	Profibus DP Interface
C25	610100	611100	610134	611136	611135
C38	610300	611300	610336	611336	611335
C51	610500	611500	610536	611538	611537
C63	610700	611700	610730	611739	611738
C76	610800	611800	610801	611801	611767
C102	610900	611900			611901

*Supplied with PD 210 display unit mounted on terminal box



PD 210 Display



600087

PD 210 Display
on terminal box lid



600379

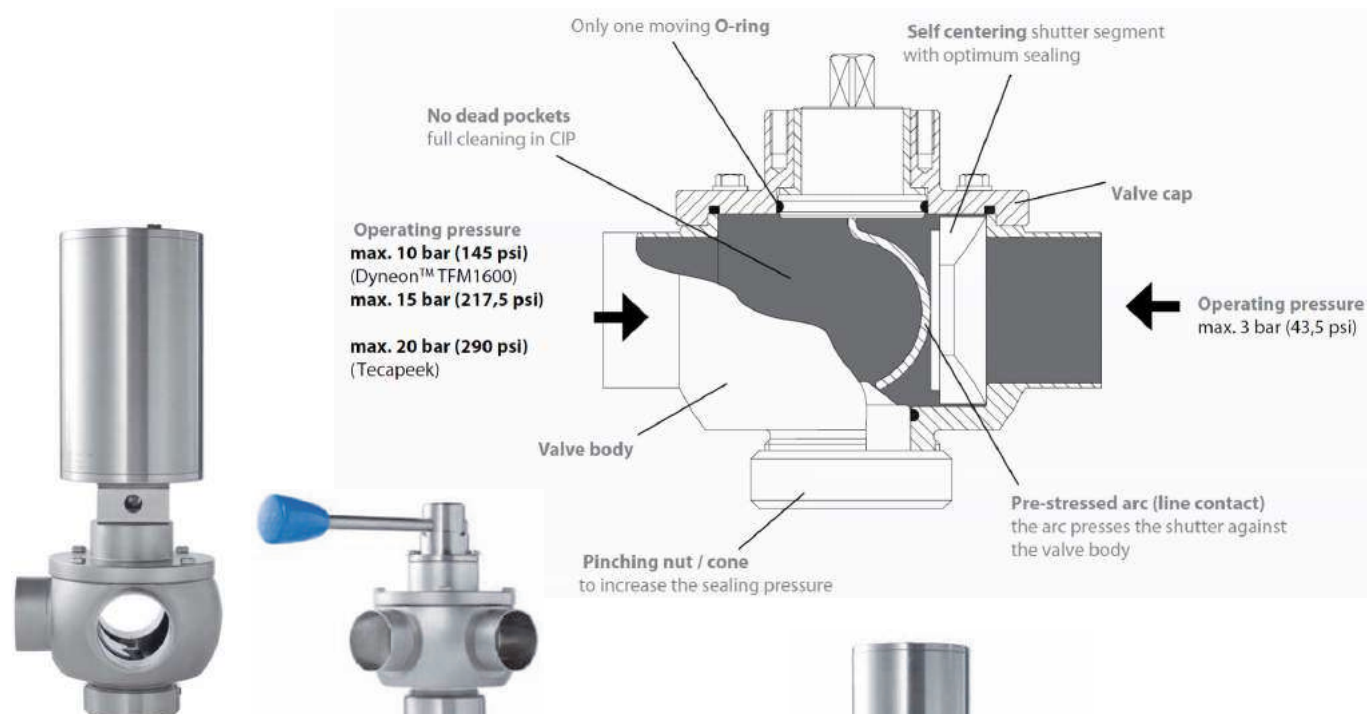
LIAG VALVES & PRODUCT RECOVERY SYSTEMS

THE HYGENIC ALTERNATIVE TO BALL VALVES



FULL FLOW
ZERO RESTRICTION

CIP-able
PIG-able



MATERIALS

Parts in contact with product : AISI 316L (1.4404)
O-ring gaskets : EPDM, Viton®, Silicone
Shutter : Teflon® (PTFE TFM1600)
optional, Tecapeek®

SURFACES

In contact with product : $R_a \leq 0,8 \mu\text{m}$ ($R_a \leq 32 \mu\text{in}$)
Option : $R_a \leq 0,4 \mu\text{m}$ EP Internal surface

TEMPERATURE

Operating temperature : 110°C (230°F)
Short-term : 140°C (284°F) optional - up to 160°C (320°F)

OPERATING PRESSURE

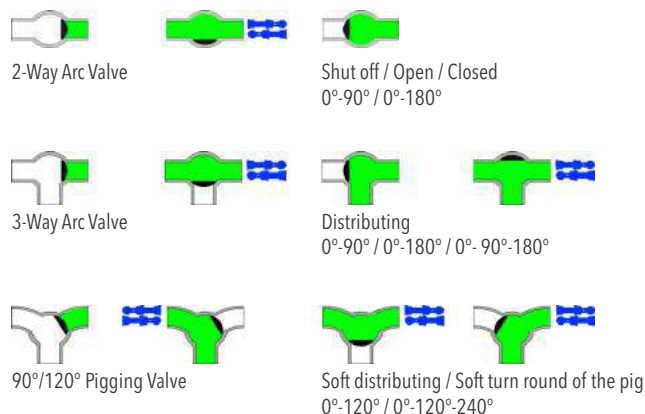
Pressure behind arc : 10 bar (145 psi) optional - up to 20 bar (290,1 psi)
Pressure against arc : 3 bar (43,5 psi)

ACTUATORS

Various feedback control systems and actuators (pneumatic, electrical), adaptable acc. Namur, DIN ISO 5211

FURTHER OPTIONS

- Heated valve casing
- Leakage control of moving O-ring seal / steam barrier
- Ball-bearing supported selector shaft
- Control valve 4 - 20 mA
- 4-way version
- 90° / 120° pigging valve
- 3.1b certification.

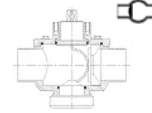


LIAG VALVES & PRODUCT RECOVERY SYSTEMS

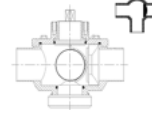
ARC AND PIGGING VALVES



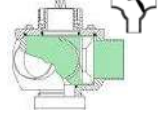
ARC 2 WAY
No Handle, Weld



ARC 3 WAY
No Handle, Weld



PIGGING 2 WAY
No Handle, Weld



SIZE	ARC 2 WAY	ARC 3 WAY	PIGGING 2 WAY
25mm / 1"	25C52N21	25C53N21	
38mm / 1.5"	38C52N21	38C53N21	38CV53N21
51mm / 2"	51C52N21	51C53N21	51CV53N21
63mm / 2.5"	63C52N21	63C53N21	63CV53N21
76mm / 3"	76C52N21	76C53N21	76CV53N21
101mm / 4"	102C52N21	102C53N21	102CV53N21
150mm / 6"	152C52N21	152C53N21	

HANDLES AND ACTUATOR MOUNTING BRACKETS

4 Position
90 Deg handles



2 Position handles
with position sensor
mount



* Sensor not included

3 x 120°
Position handles



3 x 120° Position
handles with position
sensor mount



* Sensor not included

Mounting Bracket
to suit S/S 90 Deg
Actuators



Mounting Bracket
to suit Aluminium
Actuators



SIZE	ARC VALVES		PIGGING VALVES		Mounting Bracket	Mounting Bracket
25mm / 1"	25-40SD506-90	25-40SD506-90R	25-40SD506-90	25-40SD506-90R	BRKARCLKLA2	003904/000009 (F05)
38mm / 1.5"	25-40SD506-90	25-40SD506-90R	25-40SD506-90	25-40SD506-90R	BRKARCLKLA2	003904/000009 (F05)
51mm / 2"	50-63SD506-90	50-63SD506-90R	50-63SD506-90	50-63SD506-90R	BRKARCLKLA2	003904/000009 (F05)
63mm / 2.5"	50-63SD506-90	50-63SD506-90R	50-63SD506-90	50-63SD506-90R	BRKARCLKLA2	003904/000009 (F05)
76mm / 3"	65-80SD506-90	65-80SD506-90R	65-80SD506-90	65-80SD506-90R	ARCLKLA133	003757/000010 (F07)
101mm / 4"	100-102SD506-90	100-102SD506-90R	100-102SD506-90	100-102SD506-90R	004309/004613	002909/000010 (F07)
150mm / 6"	150D506-90	150D506-90R	150D506-90	150D506-90R		002904/002905 (F10)

STAINLESS STEEL ACTUATORS 0° - 90°

** Arrow direction signifies direction of movement when air is applied.

Spring return / Air
Anti Clockwise



Spring return / Air
Clockwise



Air / Air



SIZE	Spring return / Air Anti Clockwise	Spring return / Air Clockwise	Air / Air
25mm / 1"	9612194007	9612194008	9612194104
38mm / 1.5"	9612194007	9612194008	9612194104
51mm / 2"	9612194007	9612194008	9612194104
63mm / 2.5"	9612194007	9612194008	9612194104
76mm / 3"	9612374911	9612374912	9612374913
101mm / 4"	9612374911	9612374912	9612374913

PNEUMATIC ALUMINIUM HOUSING ACTUATORS

0° - 90°
Air / Air



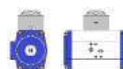
0° - 90°
Air / Spring return



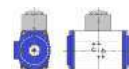
0° - 180°
Air / Air



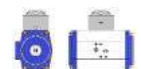
0° - 90° - 180°
Air / Air / Air



0° - 120°
Air / Air



0° - 120° - 240°
Air / Air / Air



SIZE	0° - 90° Air / Air	0° - 90° Air / Spring return	0° - 180° Air / Air	0° - 90° - 180° Air / Air / Air	0° - 120° Air / Air	0° - 120° - 240° Air / Air / Air
25mm / 1"	25-63KB50	25KB51	25-63KB180	25-63KB52		
38mm / 1.5"	25-63KB50	38-51HB51	25-63KB180	25-63KB52	38-63KB50V	38-63KB52V
51mm / 2"	25-63KB50	38-51HB51	25-63KB180	25-63KB52	38-63KB50V	38-63KB52V
63mm / 2.5"	25-63KB50	63-76KB51	25-63KB180	25-63KB52	38-63KB50V	38-63KB52V
76mm / 3"	65-80KB50	63-76KB51	65-80KB180	65-80KB52	65-80KB50V	65-80KB52V
101mm / 4"	100-102KB50	100-102KB51	100-102KB180	100-102KB52	100-105KB50V	100-105KB52V
150mm / 6"	150KA50	N/A	150KB180	150KB52		

LIAG PRODUCT RECOVERY SYSTEMS



DMV PRODUCT RECOVERY SYSTEMS

	DMV Pig without magnet	DMV Pig with magnet
SIZE		
38mm / 1.5"	38-40DV	38-40DMV
51mm / 2"	50-51DV	50-51DMV
63mm / 2.5"	63-65DV	63-65DMV
76mm / 3"	76DV	76DMV
101mm / 4"		100-102DMV



DMV LIP PIG

DMV lip pigs are of homogeneous construction (hygienic design). They offer excellent cleaning effect and are virtually free of wear. Dynamic lips form a reliable sealing. As a function of the pushing and counterpressure these lips accommodate perfectly, thereby compensating for existing deviations in the pipe geometry. The pigs are highly flexible and suited for tight radii ($R = 1,5 \times D$). As an option, dynamic lip pigs are equipped with a magnet for location and control. They are FDA-rated and available in silicone in the nominal widths DN 40 – 100 (1,5" – 4").

Contact your nearest Matrix office for a free consultation and design services.

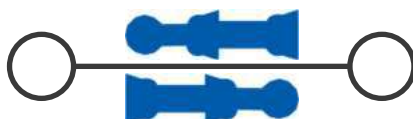
Double Loop. Automatic return of pig by use of LIAG pigging valves (closed system).



Ring System. Closed system



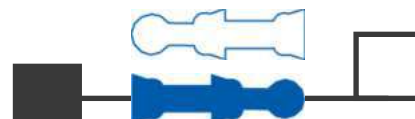
Two Way Turning Station. Automatic return of pig by use of LIAG turning station (closed system).



One Way. Manual Return of pig

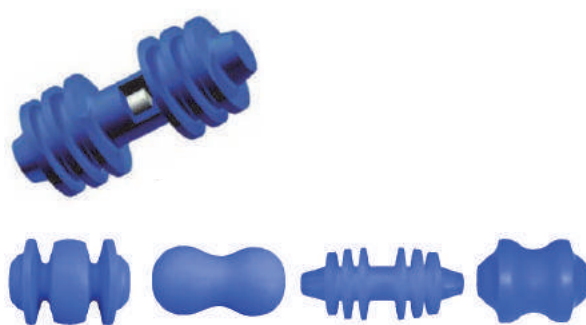


Single Loop. Automatic return of pig from receiving station, then manual change of direction.

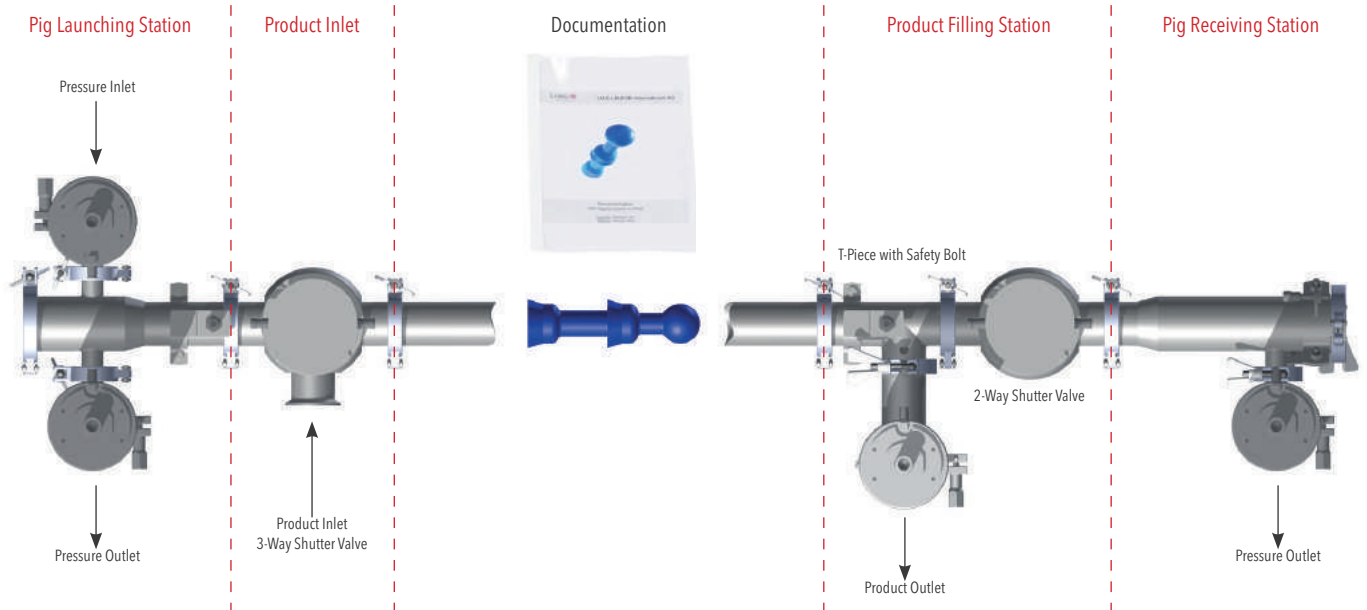


SMV PRODUCT RECOVERY SYSTEMS

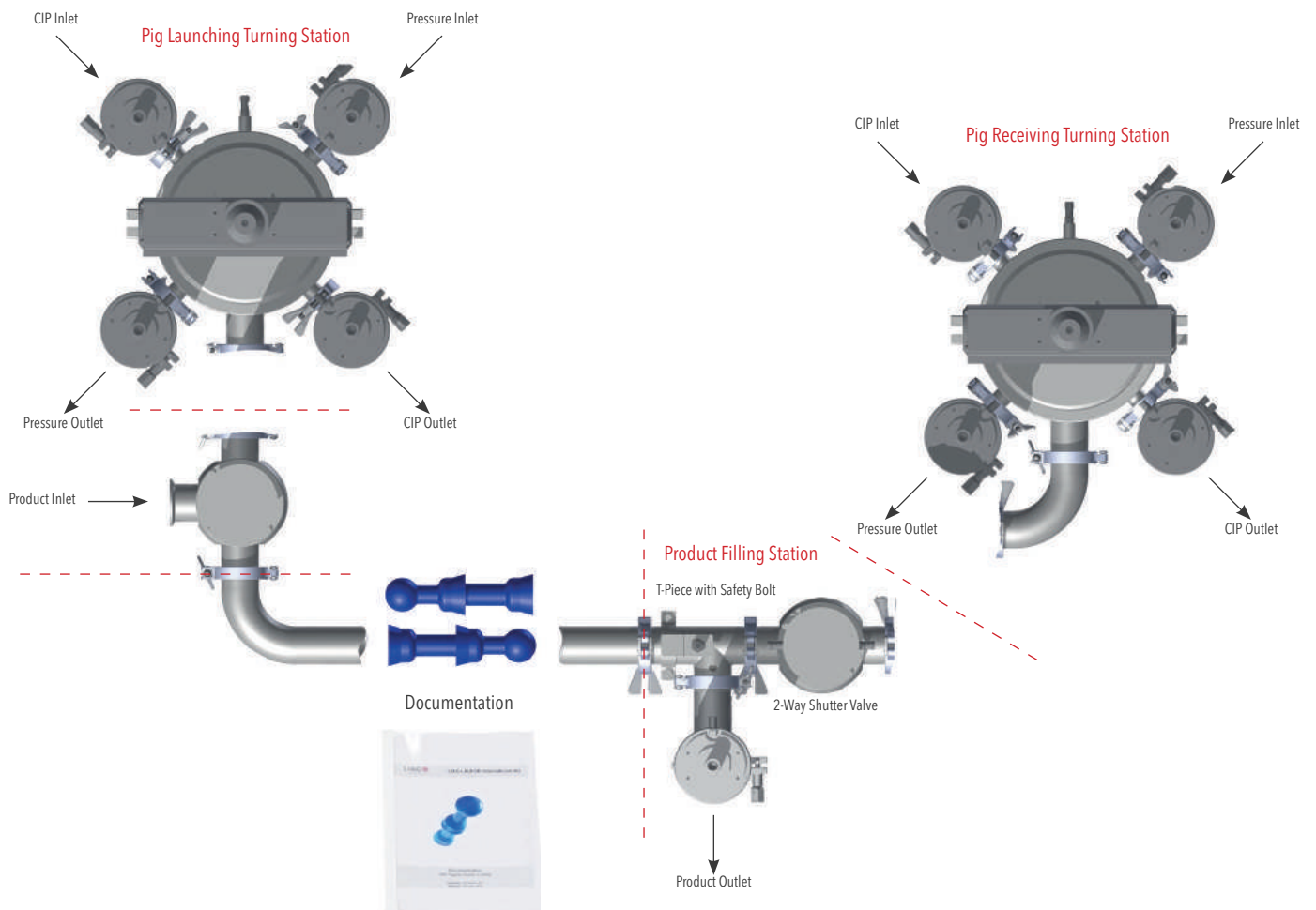
For less demanding applications where hygienic considerations are not required.



ONE-WAY Manual Pig Return



BI-DIRECTIONAL WITH TURNING/CLEANING STATIONS Automatic Pig Return using LIAG® Pig Turning Station (closed System CIP / SIP automated)



OPTIONS AND SPECIALTY VALVES

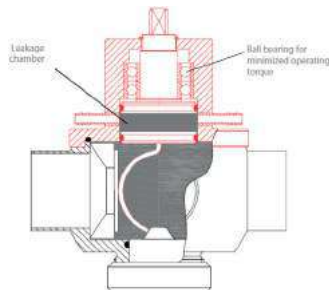
HEATED LID

LIAG® Heat Lid option, provides localised heating of the valve by use of steam or hot water. The purpose is to keep heated products at temperature at all stages of the process. Ideal for the confectionery industry.



LEAKAGE CAP

For maximum product safety, arc valves are available with a leakage monitoring system of the only moving/dynamic o-ring. The specific design identifies possible wearing defects of the seal and prevents any contamination from the outside environment. The special designed leakage chamber can act as a steam barrier or offer monitoring via means of a level conductor control (dilution of glycerine). The pivoting axle is supported with a stainless steel ball-bearing shaft for increased radial stability and 80% less required operating torque compared with the standard arc valve.



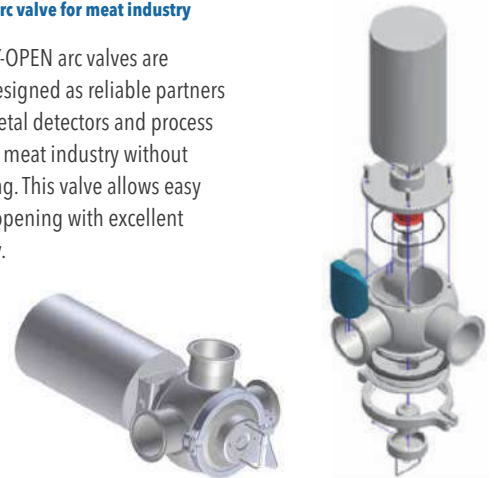
VENTURI VALVE - For powder mixers

LIAG® venturi valves are designed to enable smooth flow of powder through the valve, the middle port is orientated at a 135°/45° angle to the straight through passage. The Y-arrangement of the inlet creates the ideal flow and vacuum exhaust characteristics for proportioning and dosing. This allows for a complete full bore without reducing the nominal diameter as often experienced with the use of a butterfly valve. Furthermore the venturi valve can substitute up to two butterfly valves, which improves the operating control of the unit.



EASY-OPEN Arc valve for meat industry

LIAG® EASY-OPEN arc valves are specially designed as reliable partners of inline metal detectors and process lines in the meat industry without CIP Cleaning. This valve allows easy and quick opening with excellent cleanability.



FLOW CONTROL VALVE - Suitable for solids handling

On account of their favourable flow characteristic LIAG® arc valves are particularly suited for proportioning viscous and pasty products. Depending on the product to be proportioned LIAG® control arc valves can be delivered with various shutter qualities and linearization inserts. Control is performed via a standard 4-20mA (0-10V) electric actuator. The control characteristic / rate of flow or the control range can be adapted to customer requirements.



EXPANSION and SWIVEL JOINT

LIAG® swivel joint fittings are designed as rotating pipe connection, e.g. in a flow panel. Teflon guided rings ensure radial shore. Additionally are the extending swivel joint fittings. Able to compensate for thermal length movements of upto 75mm.

LIAG® swivel joint fittings are of hygienic design and equipped with a leakage hole for visual inspection.



SIZES

24.5, 38.1, 50.8, 63.5, 76.1, 101.8mm

LIAG VALVES & PRODUCT RECOVERY SYSTEMS



ACCESSORIES / OPTIONS

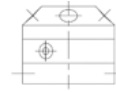
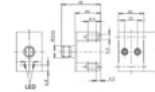
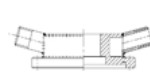
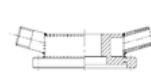
Heated Bearing Lid.
1/2" BSP connection
Arc Valves

Heated Bearing Lid.
1/2" BSP connection
Pigging Valves

Inductive proximity
switch for Alum.
act.

Target Puck

Assembly Tool for
pinching nut



SIZE

25mm / 1"
38mm / 1.5"
51mm / 2"
63mm / 2.5"
76mm / 3"
101mm / 4"
150mm / 6"

25SD505H
38-40SD505H
50-51SD505H
63SS05H
65-76SD505H
100-102SD505H
150D505H

N/A
38-40SDV505H
50-51SDV505H
63SV505H
65-76SDV505H
100-102SDV505H
N/A

25-102M55
25-102M55
25-102M55
25-102M55
25-102M55
25-102M55
25-102M55

38-102SN53
38-102SN53
38-102SN53
38-102SN53
38-102SN53
38-102SN53
38-102SN53

25-150SL
25-150SL
25-150SL
25-150SL
25-150SL
25-150SL
25-150SL

SPARES

Dyneon TFM1600

TECAPEEK

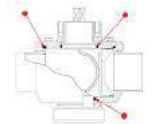
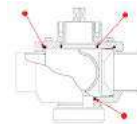
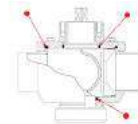
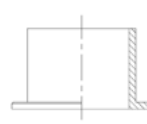
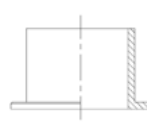
Bearing Bush POM
(std)

Bearing Bush
TFM1600

Oring Kit EPDM

Oring Kit VITON

Oring Kit FEP



SIZE

25mm / 1"
38mm / 1.5"
51mm / 2"
63mm / 2.5"
76mm / 3"
101mm / 4"
150mm / 6"

25SD501T
38-40SD501T
50-51SD501T
63SS01T
65-76SD501T
100-102SD501T
150D501T

25SD501P
38-40SD501P
50-51SD501P
63SS01P
65-76SD501P
100-102SD501P
100-102SD501P

25SD503
38-80SD503
38-80SD503
38-80SD503
38-80SD503
100-102SD503
100-102SD503

25SD503T
38-80SD503T
38-80SD503T
38-80SD503T
38-80SD503T
100-102SD503T
100-102SD503T

25SD501G
38-40SD501G
50-51SD501G
63SS01G
65-76SD501G
100-102SD501G
Upon Request

25SD501H
38-40SD501H
50-51SD501H
63SS01H
65-76SD501H
100-102SD501H
100-102SD501H

25SD501P
38-40SD501P
50-51SD501P
63SS01P
65-76SD501P
100-102SD501P
100-102SD501P



MH SHUTTER VALVES



KOLTEK

**MH SHUTTER VALVE
2 WAY (No Handle)**

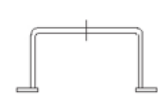
**MH SHUTTER VALVE
3 WAY (No Handle)**

**HANDLE TO SUIT 2
WAY MH VALVE**

**HANDLE TO SUIT 3
WAY MH VALVE**

**ACTUATOR
MOUNTING BONNET**

**BRACKET FOR
INDICATION UNIT**



SIZE

25mm / 1"	9612260013	9612260113	9612436204	9612436201	9612495901	9612506201
38mm / 1.5"	9612260014	9612260114	9612436204	9612436201	9612496001	9612506202
51mm / 2"	9612260015	9612260115	9612436205	9612436202	9612496101	9612506203
63mm / 2.5"	9612260016	9612260116	9612436205	9612436202	9612496201	9612506203
76mm / 3"	9612260017	9612260117	9612436206	9612436203	9612505101	9612506203
101mm / 4"	9612260018	9612260118	9612449002	9612449001	9612480801	9612506204

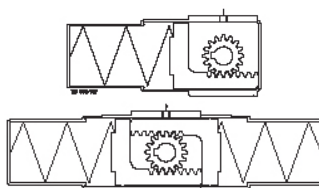
SIZE

CODE

ACTUATOR KH630 2 Pos. 90° SPRING RETURN

25 - 51mm	9612482101
25 - 51mm	9612482102 **
63.5 - 76mm	9612494601
63.5 - 76mm	9612494602 **

** Actuator to suit Indication unit



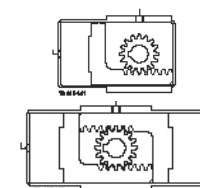
SIZE

CODE

ACTUATOR KH631 2 Pos. 90° AIR/AIR

25 - 76mm	9612479201
25 - 76mm	9612479203 **
101mm	9612480601
101mm	9612480603 **

** Actuator to suit Indication unit



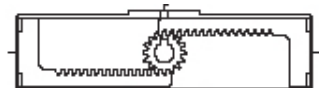
SIZE

CODE

ACTUATOR KH632 2 Pos. 180° AIR/AIR

25 - 76mm	9612479202
25 - 76mm	9612479204 **
101mm	9612480602
101mm	9612480604 **

** Actuator to suit Indication unit

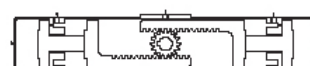


SIZE

CODE

ACTUATOR KH633 3 Pos. 90° AIR/AIR/AIR

25 - 76mm	9612495301
101mm	9612495701



BALL VALVES

**1 PIECE. 316s/s
BSP. 1000WOG**

**2 PIECE. 316s/s
BSP. 1000WOG**

**3 PIECE. 316s/s
BSP. 1000WOG**

**3 PIECE. 316s/s
BSP. 1000WOG
ISO 5211 MOUNT**

**3 PIECE. 316Ls/s
TUBE WELD
ISO 5211 MOUNT**

**3 PIECE. 316Ls/s
CLAMP ENDS
ISO 5211 MOUNT**

**ACTUATED VALVES
AVAILABLE**



SIZE

1/4"	BV008V136	BV008V236	BV008V336	BV008V339		
3/8"	BV010V136	BV010V236	BV010V336	BV010V339		
1/2"	BV015V136	BV015V236	BV015V336	BV015V339	BV015V2008W	BV015V2008TC
3/4"	BV020V136	BV020V236	BV020V336	BV020V339	BV020V2008W	BV020V2008TC
1"	BV025V136	BV025V236	BV025V336	BV025V339	BV025V2008W	BV025V2008TC
1 1/4"	BV032V136	BV032V236	BV032V336	BV032V339	BV032V2008W	BV032V2008TC
1 1/2"	BV040V136	BV040V236	BV040V336	BV040V339	BV040V2008W	BV040V2008TC
2"	BV050V136	BV050V236	BV050V336	BV050V339	BV050V2008W	BV050V2008TC
2 1/2"	BV065V136	BV065V236	BV065V336	BV065V339	BV065V2008W	BV065V2008TC
3"	BV080V136	BV080V236	BV080V336	BV080V339	BV080V2008W	BV080V2008TC
4"	BV100V136	BV100V236	BV100V336	BV100V339	BV100V2008W	BV100V2008TC

OPTIONS

Solenoids
Feedback sensors
Double Acting
Spring return

**ISO Ball Valve Mounting
Bracket. LKLA**





SIZE	CODE	LKLA ACT SIZE	ISO 5211	PCD	A
1/2", 3/8", 1/2", 3/4"	9612491817	Ø85	F03	36	9
1", 1 1/4"	9612491818	Ø85	F04	42	11
1 1/2", 2", 2 1/2"	9612491819	Ø85 A/A	F05	50	14
3"	9612491820	Ø85 A/A	F07	70	17
3", 4"	9615369102	Ø133 A/A	F07	70	17
	9615369101		F10	102	22

SERVICES VALVES

STAINLESS STEEL KNIFEGATE VALVES

SIZE	MANUAL 316s/s	ACTUATED 316s/s
50NB		
65NB		
80NB		
100NB		
125NB		
150NB		
200NB		
250NB		
300NB		
350NB		
400NB		
450NB		
500NB		
600NB		

CI WAFER/LUGGED BUTTERFLY VALVES

	WAFER	LUGGED
316s/s Disc EPDM Seat Cast Iron Body		
SIZE		
50NB	WCI050M	GU050EPDMS
65NB	WCI065M	GU065EPDMS
80NB	WCI080M	GU080EPDMS
100NB	WCI100M	GU100EPDMS
125NB	WCI125M	GU125EPDMS
150NB	WCI150M	GU150EPDMS
200NB	WCI200M	GU200EPDMS

Actuators to suit butterfly valves available
Sized on application



BSP VALVES

**BSP NON RETURN
VALVE 316 s/s
(SPRING)**



SIZE	
1/2"	BSPNRV0156
3/4"	BSPNRV0206
1"	BSPNRV0256
1 1/4"	BSPNRV0326
1 1/2"	BSPNRV0406
2"	BSPNRV0506

**BSP NON RETURN
VALVE 316 s/s
(SWING)**



SIZE	
1/2"	BSPSCV0156
3/4"	BSPSCV0206
1"	BSPSCV0256
1 1/4"	BSPSCV0326
1 1/2"	BSPSCV0406
2"	BSPSCV0506

BSP Y Type Strainer



SIZE	HOLES	
1/2"	1.5mm	BSPYS0156
3/4"	1.5mm	BSPYS0206
1"	1.5mm	BSPYS0256
1.25"	1.5mm	BSPYS0326
1.5"	1.5mm	BSPYS0406
2"	1.5mm	BSPYS0506
2 1/2"	1.5mm	BSPYS0656
3"	1.5mm	BSPYS0806

FULL FLOW DIAPHRAGM VALVES

**WIRELESS
DIAPHRAGM VALVES
(Manual)**



SIZE	
25mm	WDV0256M
38mm	WDV0406M
51mm	WDV0506M
63mm	WDV0656M
76mm	WDV0806M
101mm	WDV1006M

LKUV-2 AIR RELEASE VALVE

CODE	CONNECTION
9613426901	20mm butt weld
9613426905	38mm Tri-Clamp
9613426908	51mm Tri-Clamp



WORKING PRINCIPLE

LKUV-2 is a double-seated valve with a freely moving plastic ball. The ball, which is lighter than water, closes against the upper or lower seat, depending on the pressure conditions.

LKUV-2 is a reliable, automatic air-relief valve which is installed vertically on the top of a pipeline or container or before the inlet for a pump, where the removal of air is required.

Example 1: Bleeding of a pipe line where an air pocket has formed on account of the installation. In this case the valve is installed at the top of the pipe.

Example 2: Bleeding of a pipe on the suction side of a pump. The suction side is bled automatically, before the pump starts, establishing a vacuum. Binding of air to the product will be prevented, and hence subsequent cavitation. In this case the valve is installed in front of the pump, on top of the inlet pipe.

LKBV AIR BLOW VALVE

CODE	CONNECTION
9611250117	51mm 2"



The airblow valve is used for emptying liquids from pipe-lines or for agitating the contents of tanks by blowing air.

Air is supplied to the airblow valve from a main buffer tank via a pilot operated solenoid valve. Pressure will then build up inside the airblow valve and the valve plug will open, delivering a current of air into the pipeline system or tank.

After a certain time the solenoid valve will close. This reduces the pressure in the airblow valve and allows the spring to return the valve plug to its original position.

This process will repeat itself at intervals, thus emptying the pipeline system of liquid or agitating the contents of the tank.

UNIQUE VACUUM BREAKER VALVE

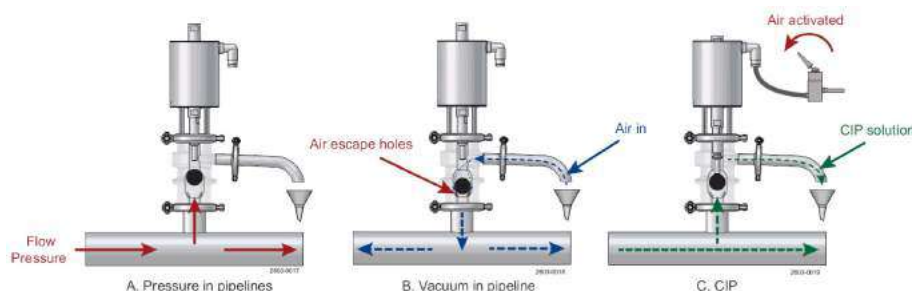
CODE	CONNECTION
9634098751	38mm



The Alfa Laval Unique Vacuum Breaker Valve operates in a manner similar to a ball check valve. When pipelines are pressurized during a process or CIP, the internal ball is forced upward against its seat, closing the vent port.

When pipeline pressure drops, the ball is drawn downward, allowing air to enter the vent, thereby preventing vacuum in the system.

During CIP, a pneumatic actuator is used (pulsed) to force the ball off the upper seat, enabling the seat and the interior of the vacuum breaker valve to be cleaned. CIP fluid is discharged during the actuator pulse and is drained through the vent port.





CONSTANT PRESSURE SYSTEM

APPLICATION

To obtain an accurate top pressure system for remote control in tanks during filling, storage and emptying conditions. The constant pressure system is applicable for control of one or more tanks working with the same top pressure.

SIZE

38mm
51mm

FILLING/EMPTY RATE

max 500 hl/h
max 1000 hl/h



SCANDIBREW CARLSBERG FLASK

APPLICATION

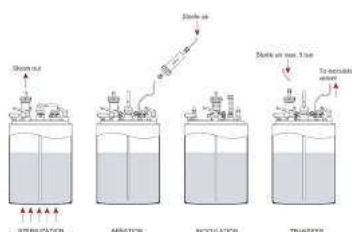
The Carlsberg flask is used for sterilizing wort and propagating pure yeast culture for yeast propagation plants in laboratory scale.

SIZE

33L

TRANSFER PRESSURE

2-3 Bar



SCANDIBREW COMBINED SAFETY VALVE (OVERPRESSURE/VACUUM)

APPLICATION

To minimise risk of tank damage due to implosion and over-pressure. Applicable as an option to dead weight or spring regulated safety valves.

CONNECTION

76mm
101mm
150mm
200mm

VACUUM

70mm
100mm
150mm
200mm

BURST DISC

50 or 80mm
80 or 100mm
80 or 100mm
80 or 100mm



SCANDIBREW TOP PLATE ASSEMBLIES

APPLICATION

For cylindro-conical tanks the special compact design and central location of the tank top system provides an efficient and economic way of mounting anti vacuum / pressure relief safety valves, CIP supply with cleaning head, pressure control etc., in a single assembly.



SCANDIBREW TANK PRESSURE REGULATOR, TYPE 2

APPLICATION

The tank pressure regulator is used on tanks within the brewing industry. The purpose of the regulator is to maintain and regulate top pressure on pressure tanks during filling, processing and emptying.

CONNECTION

50mm
80mm
101mm

FILLING/EMPTY RATE

max 1000 hl/h
max 2000 hl/h
max 3000 hl/h

WORK CAP OF FERMENTER*

max 4000 hl
max 8000 hl
max 12000 hl

*At max. fermentation rate 2.4 deg. Plato / 24 hrs.



FILTRATION UNITS



SIZE	CODE	HOLES
25mm	9612025701	1.5mm
38mm	9612025702	1.5mm
51mm	9612025703	1.5mm
63mm	9612025704	1.5mm
76mm	9612025705	1.5mm

LKIF-Inline filter with clamp ends



SIZE	CODE	HOLES
25mm	9612025801	1.5mm
38mm	9612025802	1.5mm
51mm	9612025803	1.5mm
63mm	9612025804	1.5mm
76mm	9612025805	1.5mm

LKIF-Inline filter with DS /SMS Union



SIZE	1MM HOLES	2MM HOLES	3MM HOLES
25mm	9612190120	9612190125	9612190130
38mm	9612190121	9612190126	9612190131
51mm	9612190122	9612190127	9612190132
63mm	9612190123	9612190128	9612190133
76mm	9612190124	9612190129	9612190134



D mm	C mm	Perf %
1	2	23
2	3,5	30
3	5	33

LKV-Coarse Strainer Butt Weld



LKV-Coarse Strainer Battery



SIZE	1MM HOLES	2MM HOLES	3MM HOLES
25mm	9612192110	9612192115	9612192120
38mm	9612192111	9612192116	9612192121
51mm	9612192112	9612192117	9612192122
63mm	9612192113	9612192118	9612192123
76mm	9612192114	9612192119	9612192124

'Y' Type Strainer



'T' Type Strainer



SIZE	HOLES
25mm	1.6mm
38mm	1.6mm
51mm	1.6mm
63mm	1.6mm
76mm	1.6mm
100mm	1.6mm

LKSF SLOT STRAINER

SIZES

25, 38, 51, 63, 76 & 101mm

OPTIONAL ELEMENT SIZES AVAILABLE

53µm	420µm
63µm	595µm
88µm	841µm
125µm	1190µm
149µm	1410µm
210µm	1680µm
250µm	2380µm
297µm	3360µm
354µm	4000µm

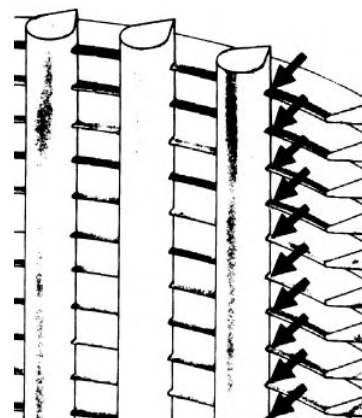
STANDARD ELEMENT SIZES

77µm
105µm
177µm
500µm
707µm
1000µm
2000µm

LKSF-BL SLOT STRAINER
Inline Wedge Wire



LKSF-CL SLOT STRAINER
Inline Wedge Wire with Backflush





ALL WE DO IS SAMPLING!

Being the world market's only true specialist KEOFIT has developed the widest and deepest product range available for hygienic, sterile and aseptic sampling of liquids in all industries.

Contact Matrix Process Solution for more information.

KEOFITT®
WORLD LEADERS IN STERILE SAMPLING™

KEOFITT SAMPLING VALVES

KEOFITT
WORLD LEADERS IN STERILE SAMPLING™

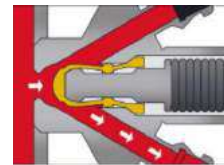


Coaxial steam sterilizable design with separate inlet for SIP and CIP: The reference for hygienic and microbiological sampling for three decades, this is the original, in-situ sterilizable sampling valve that continues to revolutionize the field of sterile sampling.

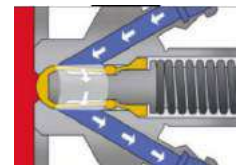
Refined over the years, it remains the most popular and best selling valve in the market by far. It is based on Keofitt's unique, patented membrane and is used in more than 150,000 sampling points worldwide everyday.

Available in four models and sizes: 4KAI (ID 5mm), W9 (ID 9mm), W15 (ID 15mm) and W25 (ID 25mm).

SAMPLING



STERILIZATION



4KAI CLASSIC

The KEOFITT CLASSIC 4KAI Sampling Valve is the smallest KEOFITT CLASSIC valve available. It is designed for the sampling of low viscosity products.

Max Particle size 1.5mm | Viscosity range 0 - 100cP

Tank(T)
Welding ø28mm



Pipe(P)
Welding ø1"



Clamp ø½"



Clamp ø1" & 1½"



Type H.
Turn knob.
0-6 Bar



Silicone

440041

EPDM

440041E

PTFE

445541

Type K.
Key ring
0-6 bar



440044

440044E

445544



W9 CLASSIC

The W9™ is the standard Keofitt® sampling valve, the valve others are measured to. Designed for sampling medium viscosity products.

Max Particle size 2-3mm | Viscosity range 0 - 1,000cP



CONNECTIONS

	Tank(T) Welding	Pipe(P) Welding ø1"	Varivent ø50	Varivent ø68	Mini Clamp	Clamp ø1" & 1½"	Clamp 2"	Clamp 3"
Hose Piece	850001	850011	850008	850009	850036	850021	850003	850004
1/2" TriClamp	850006	850010	850020	850013	850039	850022	850005	On request
Thread M16x1.5	850015	850016				850024		

Tank(T)
Welding



Pipe(P)
Welding ø1"



Varivent ø50



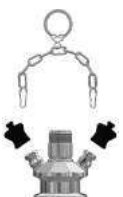
Varivent ø68



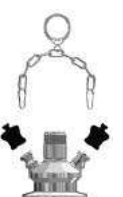
Mini Clamp



Clamp ø1" & 1½"



Clamp 2"



Clamp 3"



TYPE H TURN
KNOB 0-10 BAR
(FFKM 0-6 BAR)



TYPE H TURN
KNOB W/
MICROPORT 0-10
BAR



TYPE K
KEY RING 0-10
BAR (FFKM 0-6
BAR)



TYPE K
KEY RING W/OPT.
MICROPORT 0-10
BAR



Type B
No Spring
0-12 Bar



TYPE Q
LEVER HANDLE
0-10 BAR (FFKM
0-6 BAR)



TYPE N
PNEUMATIC 0-10
BAR (FFKM 0-6
BAR)



TYPE N PNEUMATIC,
ADJUSTABLE 0-10
BAR (FFKM 0-6
BAR)



MEMBRANE

	Silicone	EPDM	FFKM	PTFE
TYPE H TURN KNOB 0-10 BAR (FFKM 0-6 BAR)	600041	600041E	600041F	85541
TYPE H TURN KNOB W/ MICROPORT 0-10 BAR	600048	600048E	Not Available	Not Available
TYPE K KEY RING 0-10 BAR (FFKM 0-6 BAR)	600042	600042E	600042F	855542
TYPE K KEY RING W/OPT. MICROPORT 0-10 BAR	600049	600049E	Not Available	Not Available
Type B No Spring 0-12 Bar	600047	600047E	600047F	855547
TYPE Q LEVER HANDLE 0-10 BAR (FFKM 0-6 BAR)	600043	600043E	600043F	855543
TYPE N PNEUMATIC 0-10 BAR (FFKM 0-6 BAR)	600044	600044E	600044F	855544
TYPE N PNEUMATIC, ADJUSTABLE 0-10 BAR (FFKM 0-6 BAR)	600045	600045E	600045F	855545

W15 CLASSIC



The KEOFIT CLASSIC W15 Sampling Valve is designed for high viscosity products. Sampling of more viscous liquids is possible, only will it take longer (depending on process pressure).

Max Particle size 8.0mm | Viscosity range 0 - 50,000cP

Tank(T) Welding	Pipe(P) Welding	Varivent ø68	Clamp ø1" & 1½"	Clamp ø2"	Clamp ø3"	Type H Turn Knob 0-10 Bar(G) PTFE	Type B No Spring 0-12 Bar(G) PTFE	Type N pneumatic 0-10 Bar(G) PTFE
440001	440011	440021	440022	440023	440024	865541	865547	865544

W25 CLASSIC



The KEOFIT CLASSIC W25 Sampling Valve is the largest KEOFIT sampling valve. Designed for sampling of very high viscosity products. Sampling of more viscous liquids is possible, only will it take longer (depending on process pressure).

Max Particle size 17mm | Viscosity range 0 - 250,000cP

Tank(T) Welding	Varivent ø68	Clamp 3"	Type N Lever Handle Pneumatic PTFE	Type B No Spring 0-12 Bar(G) PTFE
870001	870009	870003	875544	875547

INGOLD CLASSIC



The KEOFIT CLASSIC "INGOLD" sampling valve is designed to fit bio-connectors type Ingold®. Designed for the sampling of medium viscosity products, it covers most needs for liquid sampling. Sampling of more viscous liquids is possible, only will it take longer (depending on process pressure).

Max Particle size 2mm | Viscosity range 0 - 1,000cP

			Type H Turn Knob 0-10 Bar(G)	Type Q Lever Handle 0-10 Bar(G)	Type N pneumatic 0-10 Bar(G)
I40 Body	310002	310005	310041	310043	310044
I52 Body	320002	320005			
I40 Body			310041E	310043E	310044E
I40 Body			315541	315543	315544
I52 Body			320041	320043	320044
I52 Body			320041E	320043E	320044E
I52 Body			325541	325543	325544

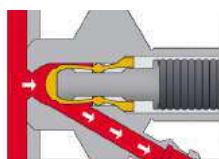
KEOFITT SAMPLING VALVES

KEOFITT
WORLD LEADERS IN STERILE SAMPLING™

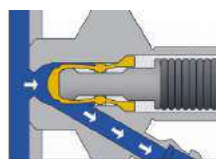


Replace your ordinary, non-hygienic sampling cocks with the KEOFIT Single-Port Sampling Valve. This valve is CIP-able with process CIP and still true to the Keofitt concept, as it is available with various process connections with manual or pneumatic operation.

SAMPLING



STERILIZATION



BASIX

The KEOFIT BASIX™ Sampling Valve is our basic CIP-able sampling valve for less demanding applications. The KEOFIT BASIX™ Sampling Valve is our product category for process CIP-able sampling valves for less demanding applications that require no separate inlet for sterilizing or sanitizing media.

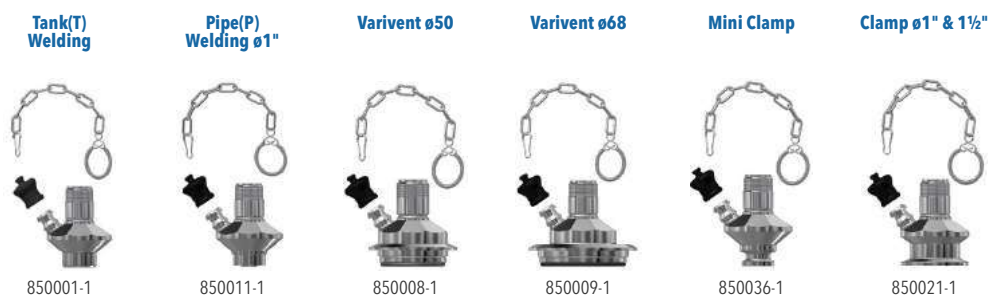
Max Particle size 1.5mm | Viscosity range 0 - 100cP

	MANUAL VALVE				PNEUMATIC VALVE			
	Tank Welding	Pipe Welding	Mini Clamp	Clamp ø1" & 1½"	Tank Welding	Pipe Welding	Mini Clamp	Clamp ø1" & 1½"
MEMBRANE								
Silicone	450141	451141	452141	452241	450144	451144	452144	452244
EPDM	450141EPDM	451141EPDM	452141EPDM	452241EPDM	450144EPDM	451144EPDM	452144EPDM	452244EPDM
PTFE	450141PTFE	451141PTFE	452141PTFE	452241PTFE	450144PTFE	451144PTFE	452144PTFE	452244PTFE

W9 SINGLE PORT

The W9™ is the standard Keofitt® sampling valve, the valve others are measured to. Designed for sampling medium viscosity products. Used in conjunction with W9 Classic heads.

Max Particle size 3mm | Viscosity range 0 - 1000cP

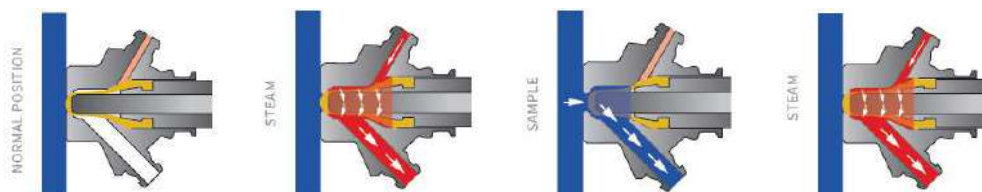


The KEOFITT SESAME Sampling Valve is KEOFITT's newest and patented dual-seat sampling valve. Truly unique in the market, it offers optimal CIP and SIP conditions while also incorporating steam supply control and completely eliminating the steam inlet dead-space in other designs.

The unique feature of this valve is in its membrane design which incorporates two separate seats for sampling and sterilizing/sanitizing, respectively. The second seat is located in the area sealing off the valve head. This design allows the sealing area to be sterilized along with the valve chamber prior to each sampling procedure. Furthermore, no separate inlet is required, thus eliminating any dead space while sampling.

The KEOFITT SESAME valve is designed for sampling of low or medium viscosity products. Sampling of more viscous liquids is possible, only will it take longer (depending on process pressure). The double-seat SESAME™ valve is used in a range of applications such as brewery, dairy, pharmaceutical and biotechnological companies, with a wide range of products

Max Particle size 3.0mm | Viscosity range 0 - 1,000cP



SESAME BODIES

Tank Welding



Pipe Welding



Varivent 50



Varivent 68



Mini Clamp



Clamp 1" & 1½"



Clamp 2"



OUTLET CONNECTIONS

Hose Piece	890001	890011	890008	890009	890036	890021	890003
½" Tri-Clamp	890006	890010	On Request	890013	890039	890022	890005
½" Welding Ends	890007	890019	On Request	On Request	On Request	On Request	On Request

SESAME HEADS

Type H Turn Knob 0-10 Bar



Type Q Lever Handle 0-10Bar



Type N Pneumatic 0-10Bar



MEMBRANE

Silicone	890041	890043	890044
EPDM	890041E	890043E	890044E
PTFE	895541	895543	895544



KEOFITT SAMPLING VALVES

KEOFITT
WORLD LEADERS IN STERILE SAMPLING™

Various

MICRO PORT

The Keofitt Micro Port is a re-sealing rubber septum designed to take samples using hypodermic needles or syringes with minimal risk of contamination. Designed for sampling low viscosity products in the range 0-50 cP.

The Keofitt Micro Port is easy to use and maintain, if needle sampling is required.

MICRO PORT

TANK



900056

Pipe Welding 1"



900057

Mini Clamp

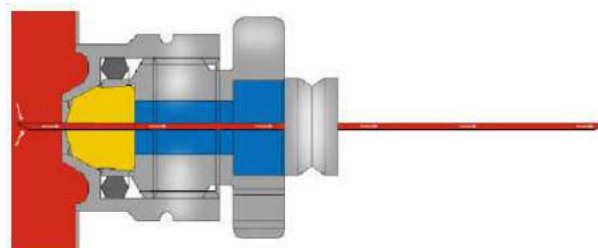


900059

Clamp 1" & 1½"



900058



MULTI MICRO PORT 49

**TANK WELDING
7XBUTYL
MEMBRANE**



840001

**VARIVENT
Ø68 7XBUTYL
MEMBRANE**



840009

**CLAMP
3" 7XBUTYL
MEMBRANE**



840020



VARIOUS ITEMS

CIP RECIRCULATOR



550010

CARLSBERG FLASK



200001

STEAM BOILER



550000

CLIP ON STEAMER



550009



KEOFITT BOTTLE SAMPLING SYSTEM

ASEPTIC SAMPLING SYSTEM

Bottle sizes 250-2000 ml

Bottle sizes 4000 / 5000ml

Sampling Bottle Head W9



260030

Sampling Bottle Head W15

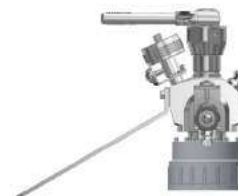


860030

Sampling bottle Head W25



870030



260005



260006

SAMPLING



STERILIZATION



The KEOFIT Aseptic System enables the user to take a truly representative aseptic sample. It protects the sample against airborne contamination, while extracting the sample, during transportation and storage.

The standard operating procedure involves steaming the sampling valve with the KEOFIT Aseptic System connected, in order to sterilize the sampling valve and the connection between the sampling valve and the KEOFIT Aseptic System. This procedure ensures the sterilization of the whole flow path in a closed circuit.

The KEOFIT Aseptic System is based on KEOFIT's guaranteed high quality, microbiologically safe valve design. It shall be used with PP sampling bottles (# 260325-1 / 260525-1 / 260625-1), which are autoclavable, robust and translucent.

SINGLE USE SAMPLING BAGS

ASEPTIC SAMPLE BAGS

Hose Piece

Mini Tri-Clamp

STERILE SAMPLING BAGS

Hose Piece

Mini Tri-Clamp

SPIKE BAGS

PP



SIZE

50ml

120050

120050TC

250ml

120250

120250TC

500ml

120500

120500TC

110500

110500TC

1000ml

121000

121000TC

111000

111000TC

131000PP

2000ml

122000

122000TC

112000

112000TC










2000ml

















The Keofitt Sampling Bags have all been developed as single-use solutions to the cumbersome and difficult task of taking a representative sample and bringing it safe and clean from the sampling point to the laboratory.










Due to shelf life considerations. Bag deliveries are based on supply agreements. Bags are not stocked but made to order.

KEOFITT ACCESSORIES





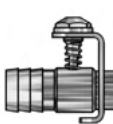
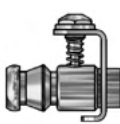



	Membrane Silicone Grey 10 pack	Membrane EPDM Black 10 pack	Membrane Silicone MP 10 pack	Membrane EPDM MP 10 pack	Membrane FFKM	Membran PTFE White	Membrane Silicone Grey	Membrane EPDM Black	Membrane PTFE White
MODEL									
M4	400051	400052				400055			
4KAI / BASIX	400051	400052				400055			
W9	600051	600052	600251	600252	600053	850055			
W15						860055			
W25						870055			
SESAME							890051	890052	890055









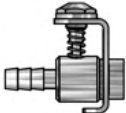
	Tommy Bar	Lever Handle Self Closing	Lever Handle Q/N	Lever Handle Q	Lever Handle Self Closing Q	Tool for PTFE Membrane	Adaptor MiniTC / 1"TC	Spike for Spike Bag	Mini TC Spike
MODEL									
M4	900018	600370	600170			400255	800014	400013	
4KAI / BASIX	900018	600370	600170			400255	800014	800013	
W9	900018	600370	600170			600255	800014	800013	900013
W15		600370	600170			860255	800014	800013	900013
W25						870255			
SESAME		600370 (N)	600170 (N)	890170	890370	880255*	800014	800013	






	Sampling Coil	XL Sampling Coil	10 pack Rubber Cap	Key Ring	Double S/S Chain	Single S/S Chain	Quick Coupling mini tri-clamp	Adaptor Hose Piece / Mini TC	Bushing
MODEL									
M4	400058		400062	400076	440064		400083	900097	400149
4KAI / BASIX	800058	800059	600062		440064	600063	800083	900096	
W9 / Sesame	800058	800059	600062	600076	600064	600063	800083	900096	600149
W15							800083	900096	

	Proximity Sensor	Proximity Sensor	Proximity Sensor mounting	HP Male Thread M12	Hose Piece / Hose Piece	Hose Piece for Tube welding	Needle	Wick for W9 Valve MP 100 pack	Emergency Tool
MODEL									
M4	400166		400167			400067 (10X8)			
4KAI / BASIX				900031	800052	700108			
W9 / Sesame	400166	600266	600267	900031	800052	700108	900022	900069	800077

KEOFITT ACCESSORIES

	Quick Coupling Plug	Quick Coupling for s/s tube	Quick Connect Syringe Injection	Quick Connect Luer lock Adaptor	Quick Coupling 12-13mm or 1/2" ID hose	Quick Coupling W9 hosepiece	Quick Coupling M4 hosepiece	KARCHER / KEOFIT Adaptor	Bushing for 4KAI / BASIX Head
MODEL									
M4	400061	400070 (8x1)			400085	400086		550057	
4KAI / BASIX	800061	800070 (10x1)	900045	800085			800086	550057	440149
W9 / Sesame	800061	800070 (10x1)	900045	800085			800086	550057	

	Quick Coupling for PTFE tube	PTFE TUBE c/w Quick Connect 0.5m	PTFE TUBE c/w Quick Connect 1.0m	PTFE TUBE Quick Connect / TC 0.5m	PTFE TUBE Quick Connect / TC 1.0m	Welding Piece for PTFE Tube	Mini TC for PTFE tube	PTFE Tube 10/8	Quick Coupling ID hose
MODEL									
M4	400091 (8x1)	550002	550003	550002,2	550003,2				400084 (ID 4mm)
4KAI / BASIX	800091 (10/8)	550002	550003	550002,2	550003,2	800075 (10/8)	300021 (10/8)	900047	800082 (ID 7mm)
W9 / Sesame	800091 (10/8)	550002	550003	550002,2	550003,2	800075 (10/8)	300021 (10/8)	900047	800082 (ID 7mm)
W15				550002,2	550003,2	800075 (10/8)	300021 (10/8)	900047	

	Membrane Butyl 10 pack	Control insert for Microport	Film Multi 10 pack	Tool Multi	Needle	Cotton Wick 100 pack	Chain	Plug	Inner plate for multiport
MODEL									
MICROPORT	900049	900102	840055	840118	900054	900055	900077	900441	840102



SIGHTGLASS SOLUTIONS

POLYSIGHT

STANDARD DESIGN

- Tri-Clamp connections
- Polysulfone Lens
- 10 Bar pressure rating
- 130 Deg C Max Internal Temperature. (Ambient external)
- EPDM Elastomers standard.
- 304 s/s or 316 s/s
- FDA, USDA and 3-A Dairy compliant
- Predrilled for quick and easy installation
- Indoor use only. Not suitable for high UV levels. (Outdoors)
- Optional UV resistant guard available on request.

Polysulfone Lens
316 s/s



SIZE	
25mm	PSK0256
38mm	PSK0406
51mm	PSK0506
63mm	PSK0656
76mm	PSK0806
101mm	PSK1006

NO GLASS



ALFA LAVAL FLEXBODY®



SIZE	1x sightglass, 1x blind cap, 2 clamps, 2 x orings	2x sightglass, 2 clamps, 2x orings
DN25 / 1"	9614464317	9614464323
DN40 / 1.5"	9614464318	9614464324
DN50 / 2"	9614464319	9614464325
DN65 / 2.5"	9614464320	9614464326
DN80 / 3"	9614464321	9614464327
DN100 / 4"	9614464322	9614464328
DN125	9614464307	9614464315
DN150	9614464308	9614464316

INLINE AND PORTHOLE

LKGG-1 INLINE
SIGHTGLASS - 316s/s
(Option with light)



SIZE	
25mm	9612141406
38mm	9612141407
51mm	9612141408
63mm	9612141409
76mm	9612141410
101mm	9612141412

Polycarbonate
sightglass lens
(to suit BSM Nut)



SIZE	
25mm	SGPH025
38mm	SGPH040
51mm	SGPH050
63mm	SGPH065
76mm	SGPH080
101mm	SGPH100
150mm	SGPH150

LKS 105
SIGHTGLASS



SIZE	
105	3201025271
105	3201025272*

*To suit Edel LUX light fitting

LKS 78 AND 120
SIGHTGLASS



SIZE	
78	9611710101
78	9611710103*
120	9611710102
120	9611710104*



SIGHTGLASSES



PN 0 or similar to
DIN 28120 (PN 2.5)



DIN 28120 / 28121



DIN 11851 Series
SSA



DIN 28120 Double
glazed with or
without heating



DIN 28121 double
glazed with or
without heating



Hinged sightglass
with or without
illumination. Series
KSG(B)



METAL FUSED SIGHTGLASSES



Metal fused
sightglass for
tri-clamp fittings



Metal fused
sightglass with
wiper series WD for
tri-clamp fittings



Metal fused
sightglass for
NA-connect
connections



METACLAMP
sightglass
for NA-Connect
connections



Metal fused
sightglass
flanges for sterile
applications

SIGHTGLASS ACCESSORIES



D-Ended elongated
series LSG (R,RR)



Rectangular series
RSG (R, RR)



Centrally operated
wipers, series W(D),
WDT, W(D)R, up
to PN6



Sideways operated
wipers. Series WS,
up to PN16



Spraying Devices,
Series SV



Sightglass discs
with or without
central bore hole

PROCESS ILLUMINATION



Halogen light
fitting. Series KLR



Halogen light
fitting. Series KVLR



Halogen light
fitting. Series HLMR



Halogen and LED
light fitting. Series
BKVLR



Halogen and LED
light fitting. Series
HLMR



Series EdeLEX d LED



Series BKVLR A /
BKVLR A LED STERILINE
for metal fused
sightglasses



Series KLR A / KLR
A LED STERILINE
for metal fused
sightglasses



Series EdeLEX
STERILINE 5/10/20
dH for metal fused
sightglasses for
tri-clamp fittings



Series EdeLEX
STERILINE 5/10/20
dH for metal fused
sightglasses for
sterile applications



Metal fused
sightglass for Tri-
clamp fittings for
series fibroLUX



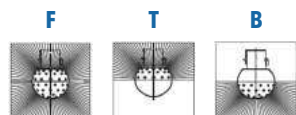
Metal fused
sightglass for Tri-
clamp fittings for
series fibroLUX, for
"view for light"

TANK CLEANING EQUIPMENT



LKRK STATIC SPRAY BALLS

Fixed spray balls are used for cleaning storage tanks in the food and beverage industries. Fixed spray balls are used for less demanding cleaning duties.



3/4" tube, 40mm Ball

CODE	m3/hr	holes
SB400206	3,7	1.6mm

cleaning rad: 3.8m @ 1 Bar



Dia 64mm for 25mm tube with 2mm holes

Dia 94mm for 51mm tube with 2mm holes

Dia 94mm for 51mm tube with 3mm holes

Type	CODE	m3/hr	CODE	m3/hr	CODE	m3/hr
B	9611710851	7,5	9611710951	18	9611710952	42
T	9611710861	8,5	9611710961	21	9611710962	44
F	9611710871	11	9611710971	31	9611710972	64

SANI TJ ROTARY SPRAY HEADS

SANIMICRO

The Toftejorg SaniMicro is a rotary spray head that uses cleaning media to provide coverage and impact. The device represents an effective alternative to traditional static spray balls because it uses low volumes of cleaning fluid at low pressure. The double ball bearing in the Toftejorg SaniMicro's rotating head makes the device suitable for all industrial cleaning applications, including tanks, reactors, vessels and other containers ranging from 0.05 to 1 m3, depending on dimensions and cleaning task.



	Units	Min	Max
Flow Rate	m3/hr	1,8	2,9
Pressure	Bar	2	2
wetting radius	M	2	2,5
Impact radius	M	0,25	0,75
Patterns	360°, 270° up, 180° down		

Connections
BSP Female : 3/8"
Clip-On : Ø19.2mm ID
Weld On : Ø19.05 x 1.65mm

SANIMIDGET

The Toftejorg SaniMidget is an efficient replacement for traditional static spray balls as it uses low volumes of liquid at low pressure. The device, particularly well-suited to hygienic applications, can be used in tanks ranging from 0.1 to 10 m3.



	Units	Min	Max
Flow Rate	m3/hr	2,2	6,5
Pressure	Bar	2	2
wetting radius	M	2,5	3
Impact radius	M	0,85	1,4
Patterns	360° 270° up 180°		

Connections
BSP Female : 3/4"
Clip-On : Ø25.7mm ID
Weld On : Ø25.4 x 1.65mm

SANIMAGNUM

The Toftejorg SaniMagnum is an efficient replacement for traditional static spray balls as it uses low volumes of liquid at low pressure. The device, particularly well-suited to hygienic applications, can be used in tanks ranging from 5 m3 to 50 m3.



	Units	Min	Max
Flow Rate	m3/hr	2,2	6,5
Pressure	Bar	2	2
wetting radius	M	2,5	3
Impact radius	M	0,85	1,4
Patterns	360° 270° up 180°		

Connections
BSP Female : 1 1/4" & 1 1/2"
Clip-On : Ø38.4 & Ø51.3
Weld On : Ø38.1 & Ø50.8

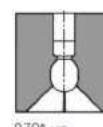
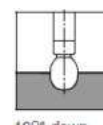
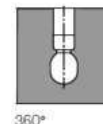
MULTI TJ ROTARY SPRAY HEADS

MULTIMIDGET

The Toftejorg MultiMidget is a rotary spray head that uses cleaning media to provide coverage and impact. The device represents an effective alternative to traditional static spray balls because it uses low volumes of cleaning fluid at low pressure. The double ball bearing in the Toftejorg MultiMidget's rotating head makes the device suitable for all industrial cleaning applications, including tanks, reactors, vessels and other containers ranging from 0.1 m3 to 10 m3, depending on dimensions and cleaning task.



	Units	Min	Max
Flow Rate	m3/hr	2,5	7
Pressure	Bar	1	3
wetting radius	M	2,4	3
Impact radius	M	0,9	1,45
Patterns	360°, 270° up, 180° down		
Connections	BSP Female : 1/2" or 3/4"		
	Weld On : Ø25.4 x 1.6mm		



MULTIMAGMUN

The Toftejorg MultiMagnum is a rotary spray head that uses cleaning media to provide coverage and impact. The device represents an effective alternative to traditional static spray balls because it uses low volumes of cleaning fluid at low pressure. The double ball bearing in the Toftejorg MultiMagnum's rotating head makes the device suitable for all industrial cleaning applications, including tanks, reactors, vessels and other containers ranging from 5 m3 to 50 m3, depending on dimensions and cleaning task.



	Units	Min	Max
Flow Rate	m3/hr	5	18
Pressure	Bar	1	3
wetting radius	M	2,8	3
Impact radius	M	1,8	2,01
Patterns	360°, 270° up, 180°		
Connections	BSP Female : 1 1/4"		
	Weld On : Ø38 x 1.6mm		



TANK CLEANING EQUIPMENT

SANIMIDGET SB & ULTRAPURE

The Toftejorg SaniMidget SB 3-A Rotary Spray Head is preliminary designed for the pharmaceutical industry with respect to self-cleaning, self-draining and inspectability. Its novel patent pending one-clip assembly offers easy installation, disassembly and inspection without compromising cleanability or drainability. Sizing/selection and installation drawing are available.



	Units	Min	Max
Flow Rate	m3/hr	3,5	9
Pressure	Bar	1	3
wetting radius	M		3
Impact radius	M		1,4
Patterns		360°, 270° up	
Connections	Clip-On	: 1" & 1 1/2" BPE	
	Weld On	: Ø25.4 x 1.6mm	

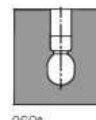


MULTIMAGMUN SB & ULTRAPURE

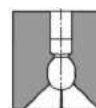
The Alfa Laval Toftejorg SaniMagnum SB Rotary Spray Head is designed with respect to Self-Cleaning, Self-Draining and Inspectability. Its novel patented One-clip assembly offers easy installation, disassembly and inspection without compromising cleanability and drainability. The Toftejorg SaniMagnum SB is an efficient replacement for the traditional Static Spray Ball as it offers liquid impact on the entire tank wall that lies within the spray pattern – a 270°U or a 360° pattern; both at a lower flow rate at equally low pressure.



	Units	Min	Max
Flow Rate	m3/hr	8	14
Pressure	Bar	1	3
wetting radius	M		4,5
Impact radius	M		2,5
Patterns		360°, 270° up	
Connections	Clip-On	: 1 1/2" BPE	
	Weld On	: Ø38 x 1.6mm	



360°



270° up

MULTIMAGMUN SB & ULTRAPURE

The Alfa Laval Toftejorg SaniMega SB Rotary Spray Head is designed with respect to Self-Cleaning, Self-Draining and Inspectability. Its novel patented One-clip assembly offers easy installation, disassembly and inspection without compromising cleanability and drainability. The Toftejorg SaniMega SB is an efficient replacement for the traditional Static Spray Ball as it offers liquid impact on the entire tank wall that lies within the spray pattern – a 270°U or a 360° pattern; both at a lower flow and high flow rate at equally low pressure.



	Units	Min	Max
Flow Rate	m3/hr	12	40
Pressure	Bar	1	4
wetting radius	M		6
Impact radius	M		3
Patterns		360°, 270° up	
Connections	Clip-On	: 2" BPE	
	Weld On	: Ø50.8 x 1.2mm	

TJ ROTARY JET HEADS

TJ 20G

The Toftejorg TJ 20G rotary jet head provides 3D indexed impact cleaning over a defined time period. It is automatic and represents a guaranteed means of achieving quality assurance in tank cleaning. Used in breweries, food and dairy processes and many other industries, the device is suitable for processing, storage and transportation tanks and vessels between 15 and 150 m3. The award-winning design is particularly suitable for hygienic industries that follow European Hygienic Equipment Design Group guidelines.



	Units	Min	Max
Flow Rate	m3/hr	5	15
Pressure	Bar	3	8
wetting radius	M	9	14
Impact radius	M	4	8
Patterns		360°	
Connections	BSP Female	: 1"	

TJ 40G

The TJ40G rotary jet head provides 3D indexed impact cleaning over a defined period. It is automatic and represents a guaranteed means of achieving quality assurance in tank cleaning. Used in breweries, food and dairy processes and many other industries with a strict demand for hygienic tank cleaning. The device is suitable for processing, storage tanks and vessels between 50 and 500 m3 and industries that require a certain level of hygienic design. The TJ40G is the best-in-class in hygienic design and tank cleaning performance.



	Units	Min	Max
Flow Rate	m3/hr	2,2	6,5
Pressure	Bar	2	2
wetting radius	M	2,5	3
Impact radius	M	0,85	1,4
Patterns		360°, 270° up, 180°	
Connections	Weld On	: 1" or 2 1/2"	
	Male	: 1 1/2" & 2" BSP	
	Female	: 1 1/2" BSP	



TJ40G DESIGN

The choice of nozzle diameters can optimize jet impact length and flow rate at the desired pressure. These special versions are available:

- **Alfa Laval TJ40G-HD** for applications where larger amounts of particles in the cleaning liquid are re-circulated over the machine. Its special design ensures that particles do not get trapped inside the machine or damage / block the machine during operation.
- **Alfa Laval TJ40G Burst** with a special burst nozzle design for fast chemical wetting of the tank. Burst cleaning reduces cleaning cycle time and the use of water and chemicals. For more information, see the separate datasheet about the burst technique.



Standard spray pattern with self cleaning



Burst Rinse spray pattern with self cleaning

TANK CLEANING EQUIPMENT



SANIJET ROTARY JET HEADS

SANIJET 20 & SANIJET 20 ULTRAPURE

The Alfa Laval SaniJet 20 is a rotary jet head tank cleaning machine for hygienic environments. Built to clean tanks with capacities from 5-30 m3 it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern. The SaniJet 20 minimizes the consumption of water, and cleaning media.



Flow Rate
Pressure
wetting radius
Impact radius
Patterns
Connections

Units	Min	Max
m3/hr	1	9,5
Bar	5	8
M		4,5
M	1,5	4
	360°	
Tri-Clamp	: 1"	



SANIJET 25 & SANIJET 25 ULTRAPURE

The Alfa Laval SaniJet 25 is a rotary jet head tank cleaning machine for hygienic environments. Built to clean tanks with capacities from 15 and 150 m3 it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern. The SaniJet 25 minimizes the consumption of water and cleaning media. Easy to customize to meet customer requirements, it allows companies to spend less time cleaning and more time producing.



Flow Rate
Pressure
wetting radius
Impact radius
Patterns
Connections

Units	Min	Max
m3/hr	5	15
Bar	3	8
M	9	17
M	4	10
	360°	
Weld On	: 1" & 1 1/2"	



RETRACTOR SYSTEMS

SSB RETRACTOR

The Alfa Laval SSB Retractor is a pneumatic static spray ball that is retractable, contributing to safe production and non-intrusive tank cleaning in hygienic applications. It is designed to achieve fast and effective cleaning of process equipment, especially where access is difficult or where intrusive cleaning equipment interferes with production.

The SSB Retractor is designed for cleaning straightforward as well as complex installations in hygienic applications, where the process cannot be disturbed by any internal components, including fixed cleaning equipment. It is ideal for use across the dairy, food, beverage, personal care, biotechnology and pharmaceutical industries.

The Alfa Laval SSB Retractor is available with two stroke lengths, 60 mm or 120 mm, and in three versions: air-to-spring, air-to-air, and media-to-spring. All wetted stainless steel components are manufactured from AISI 316L. An optional ATEX version is available for use in potentially explosive environments.



Units	Min	Max
Flow Rate	m3/hr	1,6 3,3
Pressure	Bar	2 4
wetting radius	M	9 17
Impact radius	mm	60 or 120mm
Patterns		360°
Connections		1 1/2" T/C

CLEANING VALIDATION INSTRUMENTS

ROTORCHECK BASIC AND PLUS

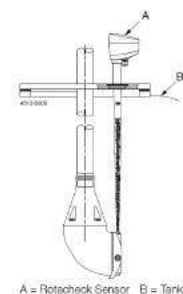
The Alfa Laval Rotacheck control and validation systems for tank cleaning machines consist of a sensor unit with top cover, o-rings and electrical cable and/or connector. The sensor unit has a sensing device located inside the processing tank and is connected to a sensor board, which processes and communicates the signal to the programmable logic controller (PLC).

Alfa Laval Rotacheck Basic

The Rotacheck Basic registers the moment when the sensor is hit by the water jet from the cleaning head.

Alfa Laval Rotacheck Plus

This advanced innovative system features unique built-in teach-in and monitoring functions to verify the proper rotation of the rotary jet head



A = Rotacheck Sensor B = Tank T/C



When constant green.
Start tank cleaning machine



Hit detected





GAMAJET BB

Efficient Wine Barrel cleaning

The Alfa Laval Gamajet BB tank cleaning device combines pressure and flow to create high impact cleaning jets. With a single insertion of the Alfa Laval Gamajet BB, barrels and 208.2 l (55 gal) drums are cleaned in only 2-3 minutes while using only 30-45 litres of water. This device offers high-performance cleaning combined with maximum durability.

GAMAJET 9

Efficient impact cleaning for small tanks and IBCs



The Alfa Laval Gamajet 9 offers compact cleaning for small tanks, totes and intermediate bulk containers (IBCs) in both industrial and hygienic applications. With fewer parts and a highly durable design, the Alfa Laval Gamajet 9 provides superior performance and is the most versatile rotary jet head available. This device readily passes through 76 mm (3") openings and can handle high pressures and temperatures, enabling quick and easy cleaning of small totes/IBCs, tanks, trash carts, and much more.

GAMAJET 7

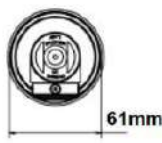
Powerful tank cleaning for small barrels and drums



The smallest rotary impingement tank cleaning device, the Alfa Laval Gamajet 7 easily fits through a 3.8 cm (1.5") access hole. Capable of operating at both high and low pressures, this device offers quick and easy cleaning of barrels, drums, and other small vessels in a wide variety of industries.

GAMAJET A2

Sanitary tank cleaner fits through 50mm (2") opening



Designed to fit through a 5.08 cm (2") sanitary fitting, the Alfa Laval Gamajet A2 is the perfect alternative to time-intensive spray balls and costly manual cleaning. Made of FDA compliant materials, this device is flow-through in design, meaning it requires no grease or oil in the gears. Compact and efficient, the Alfa Laval Gamajet A2 allows for space saving while maintaining the impact, durability, and range required for optimal rotary impingement tank cleaning in sanitary environments.

GAMAJET A2

Sanitary tank cleaner fits through 50mm (2") opening



Setting high standards for cleanliness is critical in order to maintain product quality and plant productivity. That's why we created the Alfa Laval Gamajet A6 tank cleaning device: to deliver powerful tank cleaning that provides reliable, repeatable, and verifiable results to meet the demands of the various sanitary industries such as beverage, food, dairy, and more. Designed to fit through a 7.62 cm (3") sanitary fitting, the Alfa Laval Gamajet A6 is ready for permanent installation and is the perfect alternative to time-intensive spray balls and costly manual tank cleaning.

WALL MOUNTED CLEANING NOZZELS

Alfa Laval PlusClean® is a wall mounted cleaning nozzle designed for cleaning of shadow areas in tanks; e.g. below agitator blades and other tank internals. PlusClean is smoothly integrated into the tank wall. When activated during Cleaning-in-Place (CIP), PlusClean covers cleaning shadow areas with a high impact fan of cleaning media, giving the market's first guarantee of 100% impact cleaning coverage.

APPLICATION

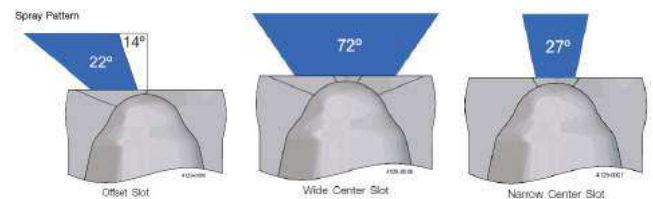
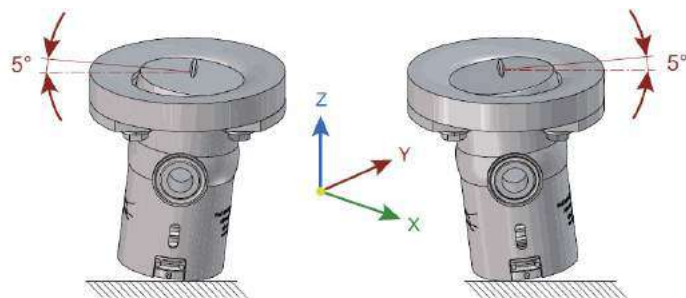
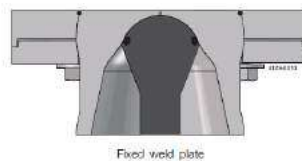
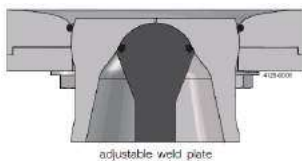
There is a broad range of applications within hygiene-critical industries such as food, beverage, dairy and pharmaceutical industries, but likewise applications such as personal care, home care and less hygiene critical applications. PlusClean is the key to ensure high product yield by eliminating any risk of contamination. This is done by targeting cleaning media to the shadow zones for reinforced hygienic tank cleaning. PlusClean is optimal for installation in all tank types and tank sizes with highest hygienic tank cleaning requirements to ensure high product quality.

BENEFITS

- High product yield with 100% cleaning coverage guarantee
- Low cleaning media consumption
- Installed flush with the tank wall, allowing the unit to be used in tanks with frame type agitators
- Easy to install using the patented adjustable flange connection
- Hygienic design
- Option for actuator & ThinkTop control unit

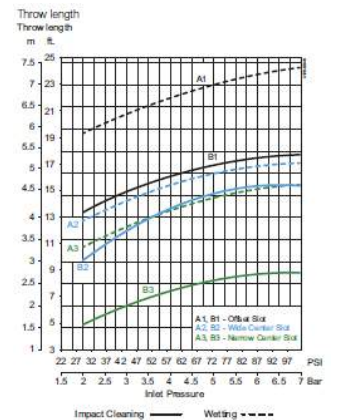
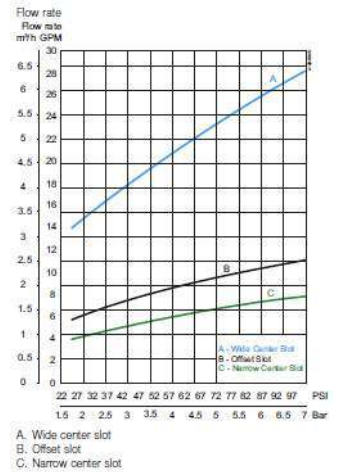
MOUNTING OPTIONS

PlusClean has 2 types of weld plates: Adjustable weld plate and fixed weld plate.



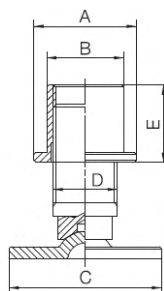
The adjustable weld plate has a curved surface on the tank side of the weld plate and allows adjusting the angle of the cleaning nozzle $\pm 5^\circ$ from the center along all 3 axes. It is drainable only when installed at an angle more than 30° . The adjustable weld plate should be used in applications where the PlusClean is installed on tank walls and tank bottoms with more than 30° inclination to horizontal.

The fixed weld plate only allows the device to rotate around Z-axis. It is drainable at all angles due to the flat top surface.



LKTC TANK LEG

The LKTC Tank Leg is capable of supporting maximum static loads of up to 160,000 N within an area of 7,800 mm². Designed to stand on a base plate, the sphere-shaped tank feet are capable of supporting a maximum load of up to 19 tons.



COMPLETE	LEG ONLY	BASE PLATE	Size	A	B	C	D	E	STATIC LOAD
9611710220	9611710290	9611710370	3/4"	38	35,5	58	3/4"	35	75000 N
9611710230	9611710300	9611710400	1"	53	39,8	79	1"	40	100000 N
9611710250	9611710320	9611710430	1 1/2"	79	65,3	105	1 1/2"	45	160000 N

OVAL DOORS

PRESSURES	ELASTOMERS	MATERIALS	SIZES
UPTO 2.5 Bar	EPDM SILICONE NITRILE VITON	304 s/s 316L s/s	440 x 320 mm 535 x 435 mm 546 x 447 mm

510 X 370



542 X 446



532 X 432 FLAT LID



532 X 432



440 X 320



ROUND DOORS

MATERIALS	SIZES
304 s/s 316L s/s	202 mm 300 mm 306 mm 400 mm 404 mm 418 mm 450 mm 454 mm 498 mm 518 mm 600 mm 620 mm
ELASTOMERS	
EPDM SILICONE NITRILE VITON	
PRESSURES	
UPTO 14.7 Bar	



RECTANGULAR DOORS - ROUND DOORS

PRESSURES	ELASTOMERS	MATERIALS	SIZES
UPTO 1.0 Bar	EPDM SILICONE NITRILE VITON	304 s/s 316L s/s	184 x 234 mm 332 x 440 mm 432 x 555 mm

R 332 X 440



R 555 X 432



R 440 X 332



R 235 X 185



R 432 X 555



TANK AGITATORS AND MIXERS



SIDE MOUNTED AGITATORS

MATERIALS

316L s/s Standard
304 s/s
904L
SAF 2205
Other materials on request

ELASTOMERS

EPDM
FPM/FEP
Other materials on request

PROPELLER

DIA : Ø125mm upto Ø1900mm

ALS SIDE MOUNTED AGITATOR



3.1b Material certification available.

TOP MOUNTED AGITATORS

MATERIALS

316L s/s Standard
304 s/s
904L
SAF 2205
Other materials on request

ELASTOMERS

EPDM
FPM/FEP
Other materials on request

PROPELLER

DIA : Ø125mm upto Ø1900mm

ALT / ALTB, TOP MOUNTED AGITATORS



3.1b Material certification available.

BOTTOM MOUNTED AGITATORS

MATERIALS

316L s/s Standard
304 s/s
904L
SAF 2205
Other materials on request

ELASTOMERS

EPDM
FPM/FEP
Other materials on request

PROPELLER

DIA : Ø125mm upto Ø1900mm

ALB BOTTOM MOUNTED AGITATORS



3.1b Material certification available.

ISO-MIX ROTARY JET MIXER

LIQUID, GAS AND POWDER MIXING

- Superior Mixing
- No Mechanical seals
- Lower operating costs
- Integrated tank cleaning solution
- Increased production capacity
- Simple Retrofit
- Blending Liquids / Gases / Powders



IM 10
vessel size
1-10m3



IM 15
vessel size
2-100m3



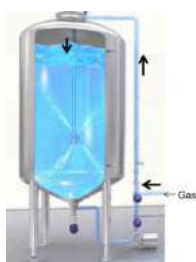
IM 20
vessel size
5-200m3



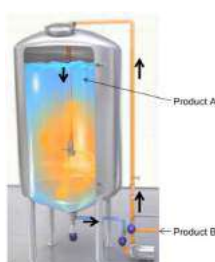
IM 25
vessel size
10-1000m3



Cleaning



GAS Dispersion



Rapid temperature change



Powder addition



MAGNETIC MIXER

ALFA LAVAL LEVIMAG & LEVIMAG ULTRAPURE

ALFA LAVAL LEVIMAG



ALFA LAVAL LEVIMAG ULTRAPURE



The Alfa Laval LeviMag UltraPure is an aseptic magnetic mixer that uses a patented levitating impeller and advanced design to mix down to the last drop and maximize product yield.

Compact, energy-efficient and easy to maintain, it provides dry-running capabilities and efficient mixing at low speeds, which ensures gentle product treatment, as well as at high speeds for high-intensity mixing. This provides greater process flexibility to handle a wide range of fluid types and mixing duties.

Its open design and low-speed rotation during cleaning contribute to no dead zones, effective residue removal and minimize contamination risks from wear particles. All this contributes to fast return on investment and maximum product yield in tanks ranging in size between 30 litres and 40,000 litres.

It is supplied with Alfa Laval Q-doc, a comprehensive documentation package that provides full transparency of the entire supply chain and helps make the validation process easy.

APPLICATIONS

Alfa Laval LeviMag UltraPure offers effective mixing for multiple processes, such as those involving serums, vaccines, plasma fractions, bacteria and cell cultures, and APIs, in the biotechnology, pharmaceutical and other industries with demanding sterile or high-purity applications.

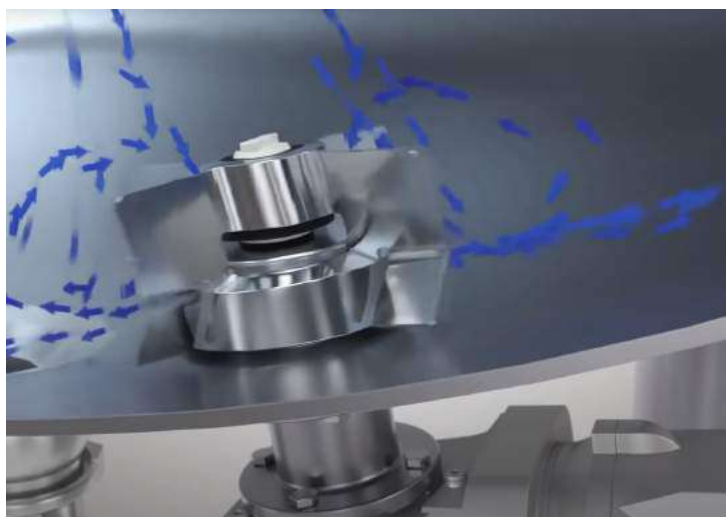
HOW IT WORKS

A radial turbine installed inside the tank is rotated via the torque from a magnetic coupling. This creates mixing of the fluid inside the tank. The patented levitated design of the Alfa Laval LeviMag UltraPure impeller makes the mixer fully drainable and able to run dry; it can therefore mix to the last drop, securing maximum yield.

The unique design of the Alfa Laval magnetic coupling ensures the levitation of the impeller at all times. This enables the complete drainability of process fluids and the free flow of CIP liquid and steam around all parts of the mixer, thereby ensuring thorough cleaning. Impeller levitation also eliminates axial wear.

The unique design of the Alfa Laval magnetic coupling ensures the levitation of the impeller at all times. This enables the complete drainability of process fluids and the free flow of CIP liquid and steam around all parts of the mixer, thereby ensuring thorough cleaning. Impeller levitation also eliminates axial wear.

The eight-winged impeller design ensures balanced operation at very low speeds and minimize wear of the bearings (2). Male bearings can easily be replaced with a bearing tool.



LeviMag in operation

HYBRID POWDER MIXER

APPLICATION

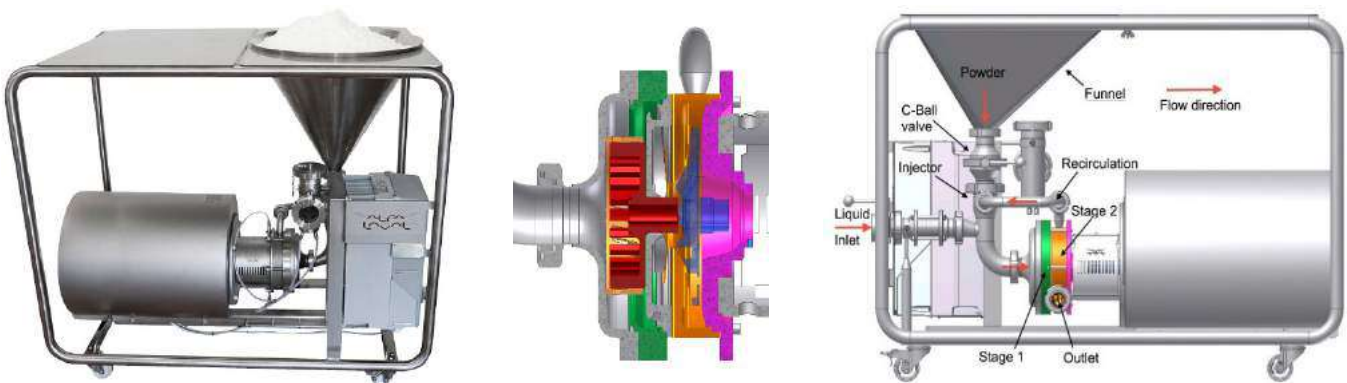
The Alfa Laval Hybrid Powder Mixer is a patented hygienic mobile unit that both disperses powders into liquids quickly and efficiently and pumps the resulting solution at outlet pressures of up to ~5 barg, all using a single motor. This versatile, easy-to-use mixer produces homogeneous products at high dry matter concentrations and high productivity.

STAGE 1 (ROTOR-STATOR STAGE)

After powder is in the funnel, the valve (C-Ball valve) under the funnel is opened. This is the only valve that the operator must control during mixing. The injector positioned under the valve creates an under pressure (over the flow from the recirculation pipe from stage 2) in the funnel outlet. The injector makes the pre-blend and draws the powder into the rotor-stator and blending the powder and liquid into a homogenous mixture.

STAGE 2 (PUMP STAGE)

An impeller pumps the powder-liquid mixture at pressures of up to 4 bar back to the tank while part of the powder-liquid mixture is sent through the injector back to Stage 1.



STATIC INLINE MIXERS

SANITARY HELICAL STATIC MIXER

Sanitary design helical static mixing units are available in 1" – 3-1/2" tubing sizes. They are of sanitary design with tri-clamp flanges suitable for use in the food, pharmaceutical, cosmetic, beverage and other industries.



SANITARY SEGMENT STATIC MIXER

Segment style inline static mixer. Designed to allow for easy extension of mixing capacity by simply adding another element. They are of sanitary design with tri-clamp flanges suitable for use in the food, pharmaceutical, cosmetic, beverage and other industries.



HELICAL STATIC MIXING ELEMENTS ONLY

Helical mixing element assemblies in metal construction are available in 316L S/S to fit virtually any pipe size. Standard sizes are made to fit Sch. 40 pipe, however mixing elements can be made to fit most pipe diameters. Sizes range from 0.25" – 12" diameter.



AMPCO PM POWDER INDUCTION BLENDER

- Blend wet and dry ingredients together quickly and precisely with the Ampco PM Powder Mixer. The PM Powder Mixer will save time and money by providing optimal mixing consistency and reduced processing time. The PM Powder Mixer is set in-line so there is no limit to the batch size.
- Mixing begins in the SP pump - the mixture flows through a short transfer tube into the Shear Blender.
- The SBH Shear Blender runs at high speed to thoroughly continue to mix the fluid and powder.



SBH Shear pump



AMPCO SB SERIES SHEAR PUMPS

SB SHEAR BLENDER

The SB Shear Blender offers flexibility for a variety of products. The clearance of the Ampco SB Shear Blender can be adjusted with the use of simple shims (provided) to get the blend quality desired. To avoid damage to the product, the SB Shear Blender is the best choice for sensitive applications.

MODEL SB

Max Flow : 45.4 m3/Hr
Max Discharge : 3.44 Bar

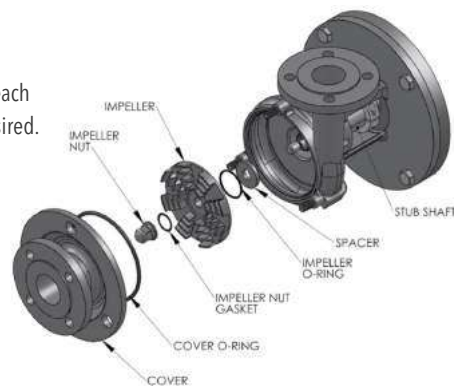


SBH SHEAR BLENDER

The SBH Shear Blender maximizes shear-area by having several rows of rectangular teeth that mesh with each other at close clearances. This is the best blender for improving process time when the highest shear is desired.

MODEL SBH

Max Flow : 45.4 m3/Hr
Max Discharge : 3.44 Bar



SBI SHEAR BLENDER

The SBI Shear Pump moves the product with considerable capacity and pressure capabilities. This is achieved through a hybrid design of a fine-tuned impeller paired with rectangular shear teeth. Users will be surprised at the performance of this pump as a replacement to a feed pump and blender setup for certain applications.

MODEL SBI

Max Flow : 45.4 m3/Hr
Max Discharge : 6.9 Bar





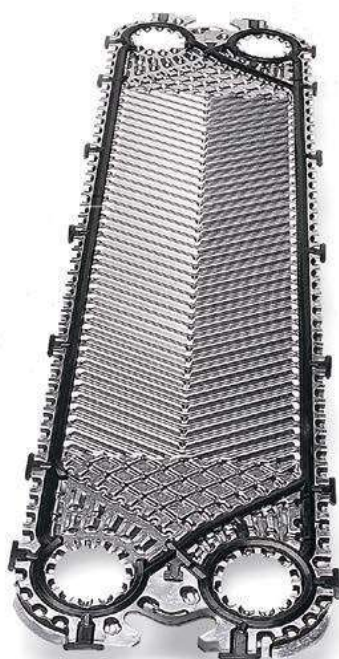
Suitable for a wide range of applications in most industries, gasketed plate heat exchangers are a compact and efficient heat transfer solution. Alfa Laval's gasketed models are designed for exceptional control, which makes them ideal for heating and cooling duties in demanding hygienic processes.

FRAME

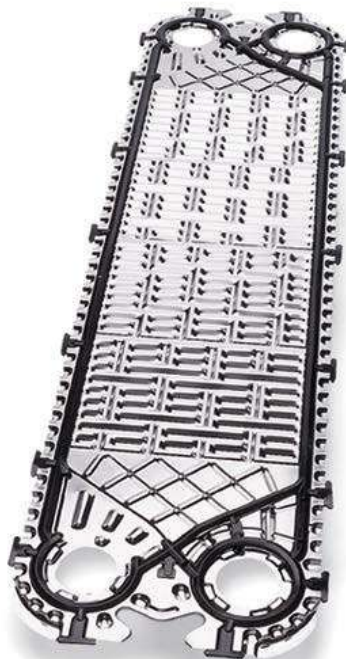
Holding the plates together are sturdy, pressure-graded frames with hygienic and labour-saving features. These offer great flexibility for expansion or rebuilding. The stainless steel versions are designed according to the most demanding hygienic standards.

PLATE TYPE

The plates themselves are available in different geometries and patterns as well as choice of materials. These include Alfa Laval's standard plates, WideStream plates and Gemini plates. Gasket material ranges from nitrile butadiene rubber (NBR) to ethylene propylene diene monomer (EPDM) rubber, which enable a perfect match for the application temperature and characteristics.



Standard: The most commonly used plate types for hygienic applications are the Alfa Laval M, T and Clip plate types. Their ideal press depth and relatively few contact points prolong operating times, while a unique distribution area ensures uniform flow over the entire plate surface. Clip plates on Alfa Laval FrontLine are specifically designed for heat-sensitive food products.



WideStream: Our WideStream plates with clip-on gaskets have very few contact points, which helps prevent blockage and results in longer uninterrupted operating times. Available only for Alfa Laval FrontLine, the plates are specially developed for the pasteurization of fruit juices and other products containing a limited amount of pulp and fibres.



Gemini: With their double walls, our Gemini plates combine excellent heat transfer with increased protection against the mixing of fluids. The plates consist of two sheets that are formed together, which prevent the media from mixing, even in the event of a cracked plate. Gemini plates are available on both Alfa Laval FrontLine and BaseLine models.



GASKETED PLATE HEAT EXCHANGERS

ALFA LAVAL FRONTLINE



The Alfa Laval FrontLine is a top-of-the-line series of plate heat exchangers. Able to meet the highest demands on hygienic control, it features a superior and flexible design that allows easy handling and modification. Among the main applications for the Alfa Laval FrontLine are dairy pasteurization, yoghurt cooling, UHT treatment and work with heat-sensitive products. The Alfa Laval FrontLine frames can be supplied in stainless steel and silver-coated versions, and the Clip plates are available in alternative materials for challenging food-processing tasks. In most cases their Clip plates can be cleaned via CIP (cleaning-in-place), using the same flow as in the process itself.

ALFA LAVAL BASELINE

With its cost-effective frame design, the Alfa Laval BaseLine series of plate heat exchangers is a competitive choice for process and utility duties. Working at pressures up to 10 bar, it handles not only heating and cooling, but also pasteurization. Typical Alfa Laval BaseLine applications include simple pasteurization, raw milk cooling, media heating/cooling and CIP (cleaning-in-place) heating.



ALFA LAVAL TS6-M

Thanks to its unique plate geometry, Alfa Laval TS6-M series of plate heat exchangers is thermally optimized for steam condensation duties. This makes it useful not only for heating water, but also for heating CIP (cleaning-in-place) solution by means of steam. Alfa Laval TS6-M plate heat exchangers are available with either stainless steel or epoxy-painted frames.



ALFA LAVAL M-SERIES AND T-SERIES

The Alfa Laval M- and T-series can handle the same applications as the Alfa Laval BaseLine series. The difference is that the M- and T-series have epoxy-painted mild steel frames instead of the stainless steel frames used for the BaseLine series and can handle design pressures that exceed 10 bar. Perfect for general product heating and cooling duties, these plate heat exchangers can also be used for pharmaceutical water systems and CIP heating.



ALFA LAVAL ALFACOND AND ALFAVAP

A smart alternative to bulky and expensive falling film condensers and evaporators, these compact solutions feature deep channels, large ports and laser welding to enable vacuum and low-pressure evaporation and condensation for aqueous and organic systems. The Alfa Laval AlfaCond plate condenser is designed for condensing vapours into liquids at low pressure. The Alfa Laval AlfaVap plate evaporator optimizes evaporation processes and provides a much higher thermal efficiency than conventional units.



FUSION-BONDED PLATE HEAT EXCHANGERS

ALFA LAVAL ALFANOVA

The Alfa Laval AlfaNova plate heat exchangers are the first in the world to be manufactured from 100% stainless steel. Thanks to AlfaFusion – Alfa Laval's revolutionary technology for bonding stainless steel components – they can withstand even extreme temperatures and pressure fatigue conditions. The exceptional performance of the Alfa Laval AlfaNova plate heat exchangers suits demanding duties in a broad range of industrial applications and utilities. Often employed to heat water or CIP (cleaning-in-place) solution by means of water and steam, they can also be used for general heating and cooling duties.



BRAZED PLATE HEAT EXCHANGERS

ALFA LAVAL CB-SERIES

The Alfa Laval brazed plate heat exchangers are extremely compact – a result of high heat transfer coefficients, small hold-up volumes and the use of thin materials. The stainless steel plates are brazed into a package without the use of gaskets, with copper serving as the brazing material. Operating costs are reduced by the heat exchangers' high thermal efficiency, while the rectangular shape and front-positioned connections make for easy installation. Resistant to heat, pressure, vibration, and above all corrosion, brazed heat exchangers are perfect in utilities such as heating water with steam.





TUBULAR HEAT EXCHANGERS

The pharmaceutical industry requires exceptional certainty, not only when it comes to product hygiene, but also when it comes to isolating products and media. To meet the industry's rigorous demands, Alfa Laval offers specially developed, high-quality tubular heat exchangers with superior hygienic design, securing full microbial control and eliminating the risk of cross-contamination. Moreover, these heat exchangers come backed by comprehensive documentation packages.



ALFA LAVAL PHARMA-X

The Alfa Laval Pharma-X tube-in-tube heat exchanger is a compact heat exchanger module for point-of-use cooling in the pharmaceutical water system, mainly for water for injection (WFI) and purified water (PW). Its unique design with no internal welds eliminates the risk of contamination between the product and cooling media.

Full drainability on the product side together with high shear force and high turbulence minimize the risk of bio-film build-up and contribute to optimal heat transfer efficiency. Fast and efficient, the Alfa Laval Pharma-X makes cold water available within seconds thereby minimizing waste and reducing costs.



ALFA LAVAL PHARMA-LINE

The Alfa Laval Pharma-line range is a double tube sheet (DTS) shell-and-tube heat exchanger that provides full drainability and prevents the risk of cross-contamination. Its bundle of seamless tubes handles the flow of product media, with service media running outside the tubes in a crossflow. Its flexibility in design, size and material make the Alfa Laval Pharma-line an ideal and cost-efficient choice for demanding hygienic applications. Typical uses include water systems, water for injection (WFI), purified water (PW) and Cleaning-in-Place (CIP) systems, as well as general product heating and cooling duties.



SCRAPED SURFACE HEAT EXCHANGER



CONTHERM SCRAPED SURFACE HEAT EXCHANGER

For continuous processing of viscous and other challenging products, the Contherm® range of scraped-surface heat exchangers means more for your production. More thermal efficiency. More yield. More quality. And ultimately, more profitability. When it comes to your business, who doesn't want more?

Contherm® scraped surface heat exchangers are a robust solution for a range of industries and applications: from food, chemicals and pharmaceuticals to health and beauty. Based on Alfa Laval's decades of expertise in thermal exchange, each unit is specially engineered to handle viscous, heat sensitive, crystallizing or sticky products, as well as those with sensitive particulate matter. Alfa Laval's rotating scraping technology continuously removes fouling material during processing. Gentle handling preserves the quality of shear-sensitive products while simultaneously providing high efficiency with a larger flow area and reduced pressure drop.



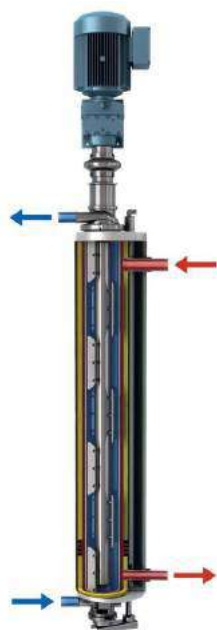


SCRAPED SURFACE HEAT EXCHANGER



Contherm

Contherm® is a single-wall scraped-surface heat exchanger (SSHE) designed for continuous and semi-continuous processing of an extremely broad range of viscosities. Its unique design offers impressive flexibility in heating and cooling operations for numerous products, with or without particles.



Contherm Core

Contherm® Core is a scraped-surface heat exchanger (SSHE) for cost-efficient production of low to medium-viscosity products with or without particles. It provides the reliable thermal performance of a standard Contherm®, but with added savings for less demanding applications.

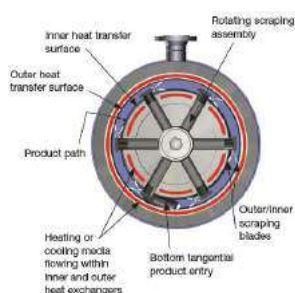


Contherm HP

Contherm® HP is a single-wall scraped-surface heat exchanger (SSHE). Designed for continuous and semi-continuous processing under high product pressures, it is the most robust design in the Contherm® family. The HP model is suitable for numerous products from a variety of industries and can support an extremely broad range of viscosities.

Contherm Max

Contherm® Max is a double wall scraped surface heat exchanger designed to provide high-capacity production of low to medium-viscosity and crystalline products as well as those with large particles. Thanks to Alfa Laval's advanced double-wall design, Contherm® Max double wall scraped surface helps boost yield while simultaneously ensuring efficient thermal performance and low total costs.



Convap scraped surface evaporator

Convap® is a single-wall, two-phase scraped-surface evaporator (SSE) with high efficiency for high-viscosity and high-fouling material. It has been specially designed to effectively concentrate products to extremely high solids levels.



No more compromises



Introducing the best-in-class Alfa Laval DuraCirc® pump

In hygienic applications, use of circumferential piston pumps (CCPs) has always meant settling for compromises. But Alfa Laval DuraCirc is something different. It's the market's first CCP that delivers the perfect balance of durable reliability, high efficiency and superior hygienic performance that's easy to service.

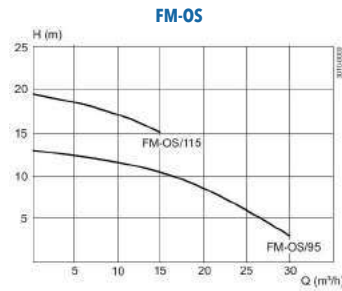
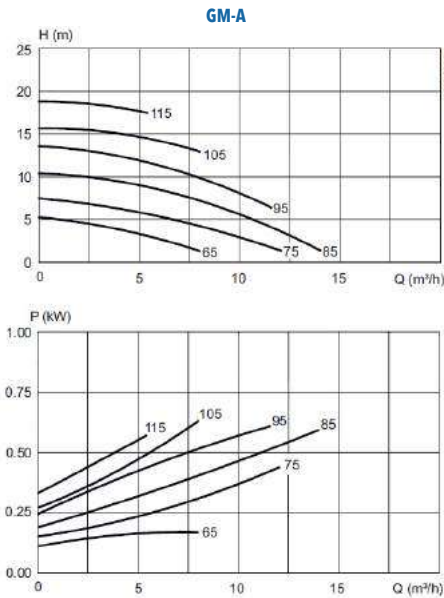
In addition to a class-leading range of flow and pressure capabilities, DuraCirc comes standard with globally recognized hygienic certification. The innovative design also includes features that make cleaning and maintenance faster, easier and more dependable.

The future of pumping is on the move. Join us at www.alfalaval.com/DuraCirc – and stop settling for compromises.

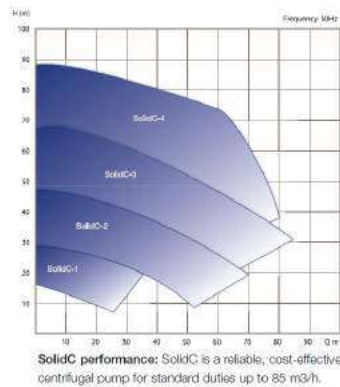


CENTRIFUGAL PUMPS

FM-OS AND GM-A CENTRIFUGAL PUMPS



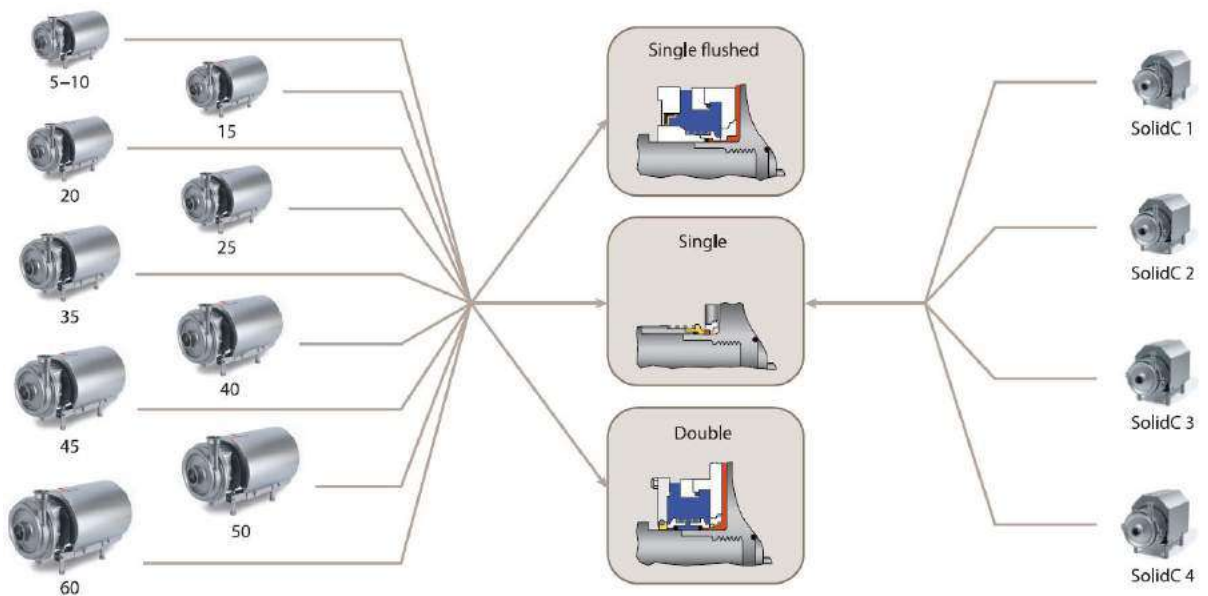
The FM-OS and GM centrifugal pumps series are economical alternatives for industries in which acid-resistant steel is required. Specifically designed to handle specific applications at low capacities, these centrifugal pumps are solid, cost-effective solutions for handling acidic products.



SOLID-C CENTRIFUGAL PUMP

The SolidC pump series is a reliable and cost-effective solution for simple transport duties up to 85 m³/h. It utilizes the same mechanical shaft seal found in our LKH series, which is front-loaded and easily replaced without removing the backplate. SolidC pumps are available in four sizes and comply with 3-A, CE and EHEDG requirements.

Maximum shaft seal interchangeability for pump ranges. Front-loaded design.

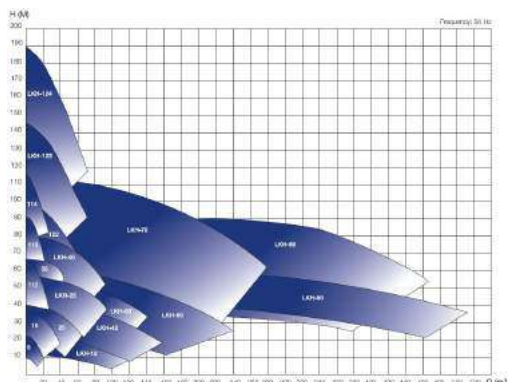


Identical shaft seal for easy maintenance and flexibility. Only one size of shaft seal is required for all LKH standard models (LKH 5-60) and SolidC (SolidC 1-4), which makes keeping the right parts in inventory simple and inexpensive. Plus, a single mechanical seal can easily be changed to a flushed or double mechanical seal in minutes with just a few extra components.

CENTRIFUGAL PUMPS



LKH CENTRIFUGAL PUMPS



The Alfa Laval LKH Centrifugal Pump is a premium pump for use in hygienic applications. To increase process productivity, it is distinguished by high efficiency, gentle product treatment, chemical resistance, and a wide range of flow rates, pressures and options.

Precision-engineered, the LKH pump delivers greater energy efficiency than similar pumps. Its optimized design, premium motor, tight tolerances and advanced impeller design minimize recirculation and reduce energy consumption.

Alfa Laval LKH Ultrapure



LKH UltraPure centrifugal pumps deliver maximum uptime and high efficiency, and offer the benefits of easy cleanability and thorough documentation. They are designed to meet the specific demands of the biotech and pharmaceutical industries. All Alfa Laval Ultrapure equipment are delivered with the standard Alfa Laval Q-doc documentation package.

Alfa Laval LKHP-F



The LKHPF pump is a highly efficient and economical centrifugal pump, specially designed for high inlet pressures, e.g. for use in filtration systems. The LKHPF pump meets the requirements of sanitary and gentle product treatment and chemical resistance, and is available in nine sizes, LKHPF-10, -20, -25, -35, -40, -45, -50, -60, -70.

Alfa Laval LKH Multistage

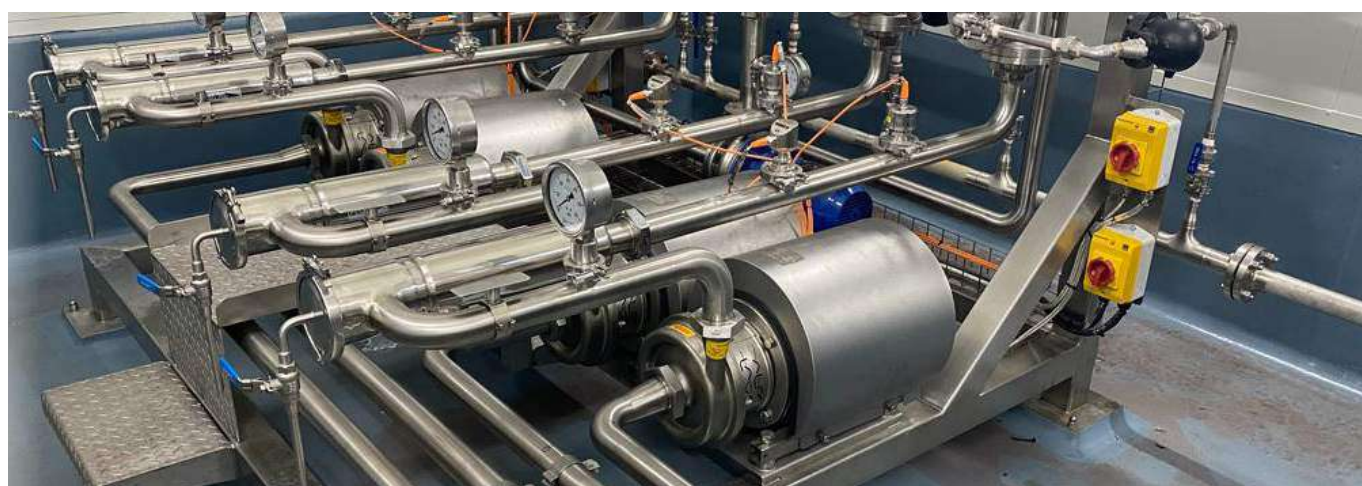


LKH-110 and -120/P are highly efficient and economical multistage centrifugal pumps, which meet the requirements of sanitary and gentle product treatment and chemical resistance. Both the LKH-110 and the LKH-120/P are available in 3 sizes, LKH-112, -113, -114 and LKH-122/P, -123/P, -124/P respectively, for 2, 3 and 4 stages.

Alfa Laval LKHI



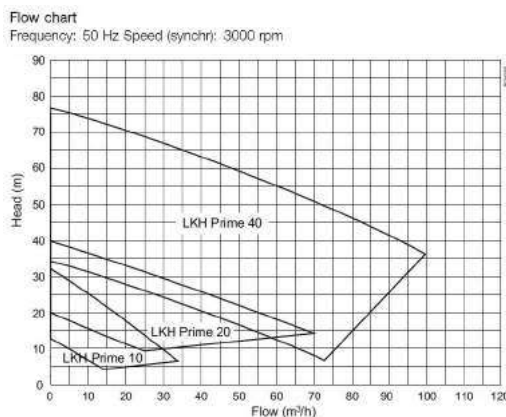
The LKHI pump is a highly efficient and economical centrifugal pump, specially designed for inlet pressures up to 16 bar. LKHI meets the requirements of sanitary and gentle product treatment and chemical resistance, and is available in nine sizes, LKHI-10, -15, -20, -25, -35, -40, -45, -50, -60.





CENTRIFUGAL PUMPS

PREMIUM SELF PRIMING PUMPS



Alfa Laval LKH Prime is a cost-effective self-priming pump that reduces energy consumption and CO2 footprint. Trimming the impeller to match the exact duty conditions lowers power requirements and installation costs.

Alfa Laval LKH Prime is up to 60% more efficient than traditional liquid ring pumps and up to 25% more efficient than other air-screw pumps – over a wider performance envelope (see graph). It operates with 80% less noise than traditional liquid ring pumps.

LKH Prime



Alfa Laval LKH Prime is an efficient, versatile and hygienic self-priming pump that uses a combination of air-screw technology and advanced design to meet the most stringent requirements in a range of hygienic industries including food, dairy, beverage, home and personal care. Primarily used for Cleaning-in-Place duties containing entrained air, it can also pump product, reducing capital investment.

LKH Prime ultrapure



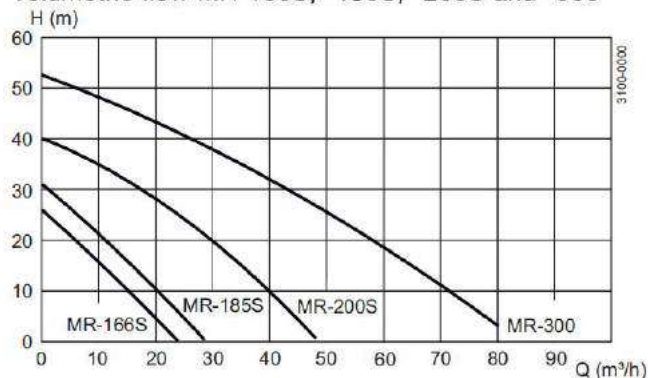
The LKH Prime UltraPure is a highly efficient self-priming pump, which meets the requirements of pharmaceutical industries. The ability to evacuate air from the suction pipe combined with a low noise level and high pumping efficiency makes the LKH Prime UltraPure ideal for tank emptying and CIP return applications. With verified effective CIP cleanability, LKH Prime UltraPure can be used as a product pump as well.

MR LIQUID RING PUMPS



MR is a liquid-ring pump specially designed for pumping liquids containing air or gas. The pump is for use in food, chemical, pharmaceutical and similar industries. The pump is mainly used for CIP-return application.

Volumetric flow MR-166S, -185S, -200S and -300



ROTARY LOBE PUMPS

Alfa Laval SRU



The Alfa Laval SRU Rotary Lobe Pump is a reliable positive displacement pump for the gentle handling of sensitive process fluids. The pump is carefully engineered to provide reliable performance, trouble-free operation and superior energy efficiency for demanding applications. It is an excellent choice for duties that require contamination-proof pumps to meet high standards of hygiene, low-shear and low-pulsation operation. The pump is designed according to the most stringent hygienic design standards and with verified, effective Cleaning-in-Place.

Alfa Laval SX



The Alfa Laval SX Rotary Lobe Pump is designed with optimized pump head geometry and multi-lobe rotors to ensure low-shear operation with minimum pulsation. This makes the SX the best choice for maintaining the integrity of delicate products. The pump is designed according to the most stringent hygienic design standards and with verified, effective Cleaning-in-Place (CIP) and Sterilization-in-Place (SIP).

Alfa Laval SX Ultrapure



The Alfa Laval SX UltraPure Rotary Lobe Pump is designed with optimized pump head geometry and multi-lobe rotors to ensure low-shear operation with minimum pulsation. This makes the SX UltraPure the best choice for maintaining the integrity of delicate products in high-purity applications. The pump is designed according to the most stringent hygienic design standards and with verified, effective Cleaning-in-Place (CIP) and Sterilization-in-Place (SIP).

Alfa Laval Optilobe



The Alfa Laval OptiLobe Rotary Lobe Pump is a cost-effective alternative for general applications that require gentle product treatment and easy serviceability. Versatile, dependable and energy efficient, this hygienic positive displacement pump enhances both process flexibility and operational reliability. The pump is designed according to the most stringent hygienic design standards and with verified, effective Cleaning-in-Place.



POSITIVE DISPLACEMENT PUMPS

CIRCUMFERENTIAL PISTON PUMPS

Alfa Laval DURACIRC



The Alfa Laval DuraCirc delivers the perfect balance of durability, reliability, high efficiency and superior hygienic performance. Combined with design features enabling simple service, the DuraCirc keeps process running. In addition to a class leading range of flow and pressure capabilities, DuraCirc comes with globally recognized hygienic certification. The innovative design also includes features that make cleaning and maintenance faster, easier and more dependable.

Alfa Laval DURACIRC aseptic



The Alfa Laval DuraCirc Aseptic delivers the perfect balance of durability, reliability, high efficiency and superior hygienic performance. Combined with design features enabling simple service, the DuraCirc Aseptic keeps process running. In addition to a class leading range of flow and pressure capabilities and globally recognized hygienic certification, DuraCirc Aseptic specification allows for a sterile environment to be maintained within the pump. The innovative design also includes features that make cleaning and maintenance faster, easier and more dependable.



Supreme Performance

Engineered for durability, reliability and efficiency to extend the boundaries of your performance.



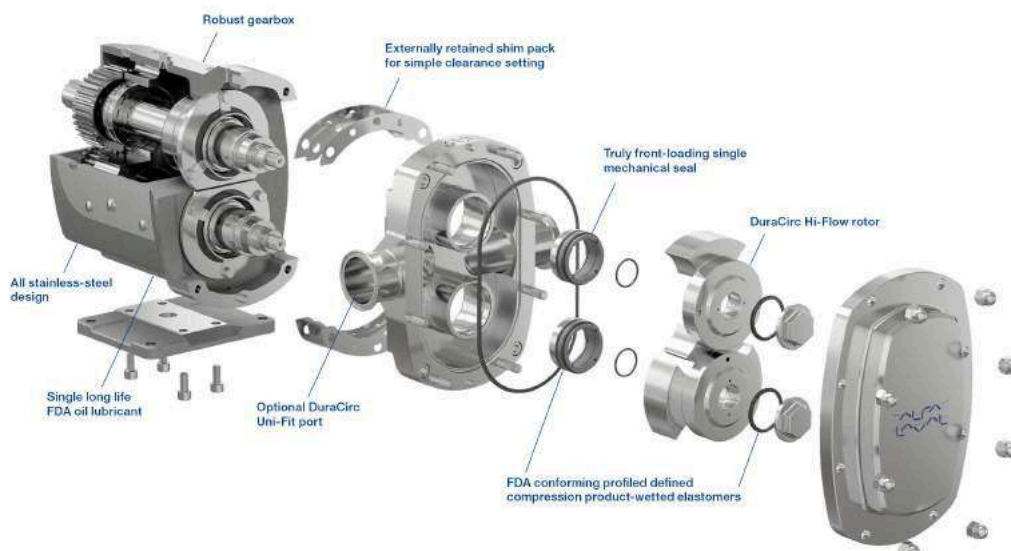
Superior Hygiene

Safely meets industry hygienic demands, assuring the integrity of your processes and the quality of your products



Simpler Service

Innovative design features make maintenance faster and easier, increasing uptime in your operations



TWIN SCREW PUMPS



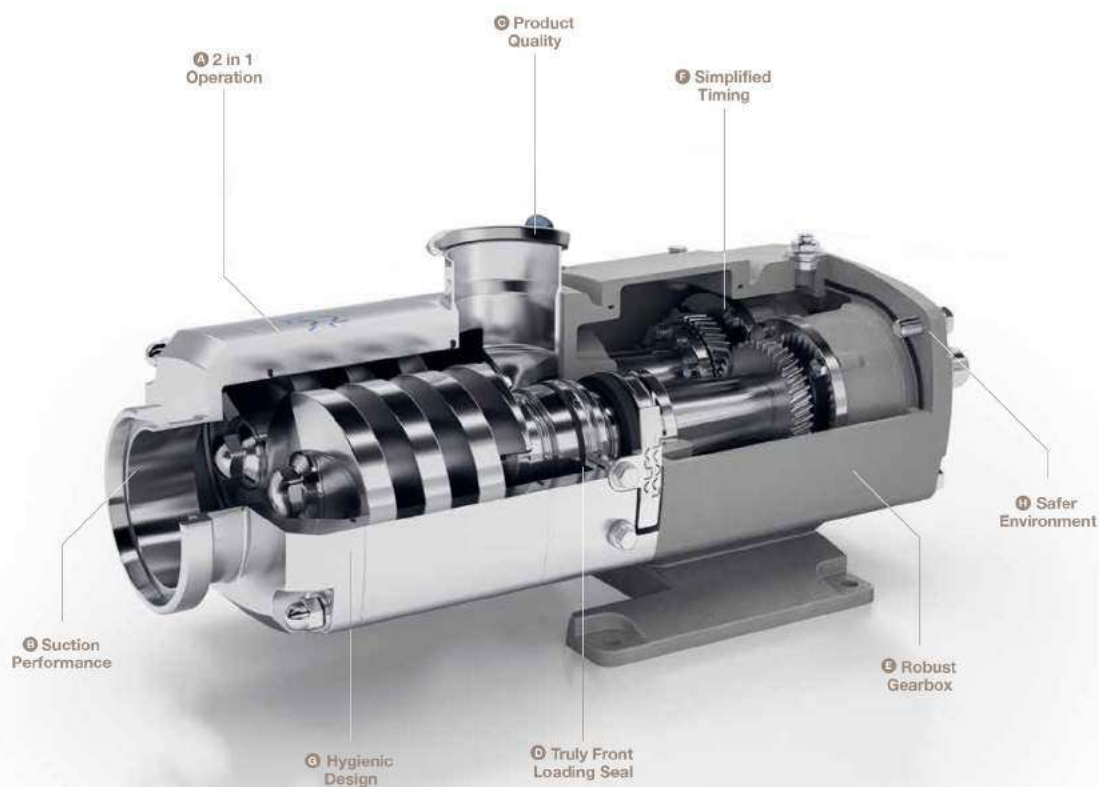
Alfa Laval Twin screw



The Alfa Laval Twin Screw Pump combines process duties typically handled by positive displacement with Cleaning-in-Place (CIP) duties typically handled by centrifugal pumps. This provides a robust and reliable platform that offers greater process flexibility.

Designed for process flexibility, the Alfa Laval Twin Screw Pump is built on a robust, reliable platform that meets stringent hygienic standards. It is capable of handling both product transfer and CIP. Its low pulsation characteristics and excellent solids-handling capability reduce the risk of product damage, thereby improving product quality.

The pump is designed according to the most stringent hygienic design standards and with verified, effective CIP.



DOSING AND PROCESS PUMP



GATHER magnetic drive gear pumps are designed for dosing as well as process pump operations. They are complemented by the Wankel (rotary piston) pump ensuring excellent conveying and pressurizing performance. The distinctive mark of these hermetically sealed pumps is long service life and non-pulsation dosing, especially of non-lubricating liquid such as water, salt solutions and solvents but also of acid and caustic solutions.

Viscosities	: 0,1 to 2000 mPa s (cP)
Temperature	: -200°C to 450°C
Volume flow	: 20 ml/h to 4000 l/h
Pressure	: to 20 bar

MINI CENTRIFUGAL PUMP



This magnetically coupled mini process pump from GATHER Industrie GmbH is a modern process pump for the pulsation-free metering, pumping and circulation of water, salt solutions, acids, alkalis and solvents.

The delivery rate is adjustable both by metering valve and frequency converter. Its combination of robust, proven journal bearing technology (including efficient cooling/liquid circulation) and the maintenancefree, hermetically sealed magnetic coupling from the GATHER gear pump in a simple centrifugal pump design creates a low-cost, sturdy, reliable and safe multipurpose pump.

Viscosities	: 1 to 500 mPa s (cP)
Temperature	: 0°C to 85°C
Volume flow	: 0,6 ml/h to 180 l/h
Pressure	: to 10 bar

MINI CENTRIFUGAL PUMP



The magnetic drive GATHER gear and turbine pumps are designed for both dosing and process pump service. They are complemented by the Wankel (rotary piston) pump ensuring excellent pressurizing performance. The unique characteristic of these hermetically sealed pumps is long service life and non-pulsation dosing, especially of non-lubricating liquid such as water, salt solutions and solvents but also of acid and caustic solutions.

Viscosities	: 0,4 to 100 mm ² /s (cSt)
Temperature	: -200°C to 450°C
Volume flow	: 60 l/h to 3600 l/h
Pressure	: to 5 bar



CRAFT BREWERY SOLUTIONS

ROLEC DH - DRY HOPS ADDITION SYSTEM

DH90



The ROLEC DH units utilizes the Ampco SBI pump to recirculate a fermenter and simultaneously induce dry hop pellets into the stream of beer. The pellets are held in a pressurised chamber, which is purged of air using carbon dioxide (CO2). Pellets can be induced into fermenting, finished, or crashed beer. The shear pump creates a differential pressure for induction of the pellets from the hop vessel. The pellets are chopped to just the right size so they can settle during the dry hop holding period.

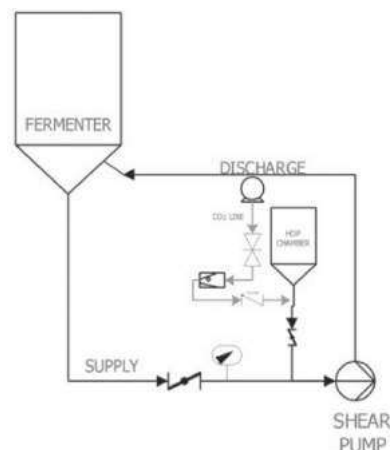
MODEL	PELLET CAPACITY	PUMP	RECIRCULATION /MIN	PORT SIZE	MOTOR
DH45	20kg	SBI-R10	2.9 bbls / 3.4hl	2" x 1.5"	4.0kW
DH90	40kg	SBI-R10	2.9 bbls / 3.4hl	1.5"	4.0kW
DH250	120kg	SBI-R20	3.7 bbls / 4.3hl	2"	7.5kW

- A glass top manway allows the user to ensure the pellets are moving
- Gauges and sightglasses aid the user in monitoring induction and pressures
- Everything needed for pellet induction is contained on the ROLEC DH.
- All components are sanitary and CIP-able (no additional CIP pump is required.)
- The fully portable DH can be used on many fermenters and fits well in cramped cellars.
- Recirculation can be done as long as desired. (Ampco recommends 3-4 fermentation turnovers)
- Improved aroma and flavour profile.

DH45



DH250



Suspended hop particles



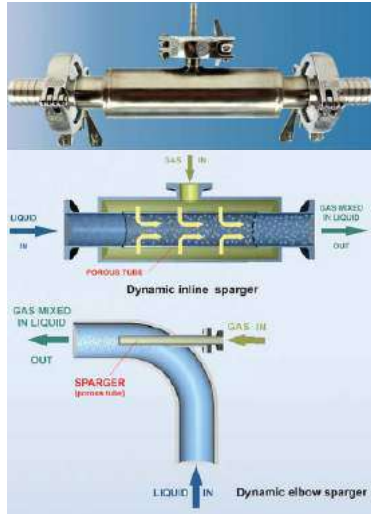
Hops particles after settling



No Additional CIP pump is required

CRAFT BREWERY SOLUTIONS

GKN SPARGING DEVICES



The GKN filters are produced by an Isostatic com-pacting process, which results in outstanding homo-geneous pore size distribution with excellent burst and collapse resistance, based on seamless design. The high mechanical strength is leading to complete self-supporting structures.



GKN SPARGER

Conventional Sparging units

SEPERATION MODULES



Alfa Laval BREW 250

The Alfa Laval BREW 250 is a compact separation module, which features Alfa Laval's unique fully hermetic design. The airtight design is achieved through a combination of a hollow spindle inlet, a hermetically sealed outlet and a separator bowl that is completely filled with liquid.



Alfa Laval BREW 80

The Alfa Laval BREW 80 is a compact plug'n play separation module with a very small footprint, which reduces the amount of floor space needed in breweries.

BREWERY MODULE PUMPS AND CART PUMPS



THE CB+ FOR CRAFT BREWING APPLICATIONS

Ampco's CB+ pump was designed specifically for the craft brewing industry and the aficionados who are passionate about creating their signature brews, not dealing with leaking pumps.



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

MURZAN

PI-50 DIAPHRAGM PUMP



The Murzan PI 50 is the only diaphragm pump specifically designed to meet the special requirements of the sanitary industry. High efficiency oil free air valve, maintenance free check valve systems, and total visual inspection of all wetted parts give the user a safe and efficient transfer of foods, cosmetics and pharmaceuticals. EHEDG, USDA listed, FDA Approved, the PI 50 series is manufactured to meet general 3-A standards.

Our unique design allows for total visual inspection of all wetted parts. There are no blind spots or hidden areas for bacteria to grow. Simply remove the manifold clamps and chamber clamps for complete disassembly and cleaning.

- Easy to sterilize and clean in place (CIP able)
- Design allows for complete visual inspection of the wetted parts
- Self Priming up to 7.3m
- Pneumatic
- No mechanical seals
- Ability to run dry without damage
- Maintains product integrity
- Can pump viscosities up to 150,000 CPS
- Solids upto 150mm
- Portable



Mobility Option



Ball Valve



Flapper Valve



Mushroom Valve

DUS-50 Drum Unloading System



The Murzan DUS (Drum Unloading System) is the ultimate drum unloading solution for emptying the most viscous materials from various types of containers. The containers can be made of metal, plastic, or fiber.

The DUS will reduce your total unloading time and labor requirements.

The DUS is made up of 100% Stainless Steel materials, including the frame and cylinders. The unit is provided with a NEMA 4X control panel that contains all the pneumatic components.

TUS Tote Unloading System



The Murzan TUS (Tote Unloading System) has been successfully used for over thirty years in unloading highly viscous products from totes and bins. These 300-gallon totes can be made of wood, plastic, or cardboard.

The TUS is operated through a PLC (programmable logic controller), with electro-pneumatic controls, contained in a NEMA 4X panel.

Empties 300 gallons of the heaviest and most viscous products, such as 33° Brix Tomato Paste in less than 12 minutes without adding any water.

KUS Kettle Unloading System



The Murzan KUS (Kettle Unloading System) offers the cleanest solution for unloading contoured high shear mixing bowls, primarily in the bakery industry. The unit provides sanitary, hands on solution for transferring products such as batters, icings, and fillings that may contain delicate solids.

The Murzan KUS can be used to feed multiple depositors from one location. This unit is portable and can be cleaned-in-place. The follower plate can be custom made for different shape containers. The unit is also built in 100% Stainless steel, with all its electro-pneumatic controls contained in a NEMA 4X panel

CBTU Marinated Products Transfer Unit



The Murzan CBTU (Marinated products transfer unit) can increase yields, increase production, reduce labor costs and reduce sanitation costs. It can be accomplished without compromising the integrity of your product.

The CBTU is designed to pump directly from your vacuum tumbler discharge to your IQF, frying lines, or breading tumbler. The unit allows you to pump chicken tenders, fillets, or disjointed wings without damage. We have successfully pumped product at a rate of 10,000 pounds an hour, at a distance of up to 100 feet.

AIR OPERATED DOUBLE DIAPHRAGM PUMPS

MURZAN

DUS-50 Drum Unloading System



The Murzan AB-70 series (AB72 and AB76) pneumatic suction wand eliminates the risk associated with the handling of suction wands. There is no need to remove the drums individually from the pallet, simplifying the unloading operation. The use of a joystick in the controls allows the user to reach any of the four drums on the pallet. The suction wand is lowered into the drum via switch. This system allows us to use any size suction wand for optimal unloading.

CUSTOMIZABLE SUCTION WAND OPTIONS INCLUDE

- Rinsing of the container.
- Non-return suction wand.
- Mechanism for preventing suction of drum liners.
- CIP holster that enables cleaning of the wand, hose, and pump at the same time.
- Ability to unload a pallet while you stage a second one.
- Tote tiller for unloading square totes.
- Ability to use with tote containers.

ABDT Drum Unloading System



- The Murzan ABDT is a high capacity drum unloading system, used for transferring heavy products such as beverage bases, juice concentrates, and tomato pastes.
- The Murzan ABDT is the ultimate approach for unloading multiple containers at the same time.
- The Murzan ABDT is a user-friendly system operated by means of a PLC and touch screen. A single operator can easily control the entire unloading sequence.
- The system eliminates removing your containers from the pallet and drastically increases your production capabilities.
- The ABDT offers rinse and metering capabilities.
- Optional load cells/metering integration makes the ABDT a powerful batching system.

PI-50 POULTRY PUMP



The Murzan PO-50 Poultry Pump is the only sanitary diaphragm pump specifically designed with the needs of the poultry industry in mind. This pump can easily handle solids up to 4" (10 cm) in diameter or 7" (17 cm) long without damaging the product.

The Murzan PO-50 Poultry Pump reduces water usage for every pound of product processed. The pump works commonly in two shifts of production and one shift of cleaning at a very low maintenance cost.

CAPACITY

Capacities up to 240 chicken necks per minute in solution may be achieved depending on the concentration of solids and total dynamic head (TDH) of the system. Rates for smaller solids will be greater subject to the same conditions.

APPLICATIONS

- Complete Feet
- Paws
- Necks with or without skin
- Chicken skin without water
- Heads
- Intestine pack
- Blood
- Gizzards
- Livers
- Hearts





FULLY TRAINED
QUALIFIED
PROFESSIONAL
CERTIFIED
COMPLIANT
CALIBRATED
FULLY EQUIPPED





PREVENTIVE MAINTENANCE

BY _____ DATE _____

NEXT CHECK DATE _____



Matrix Process Solutions Pty Ltd provides an array of capabilities for the preventative maintenance and repair for all its equipment and other process equipment brands.

All our service engineers are fully trained and attend regular manufacturer conducted factory training programs to ensure your equipment is performing to its optimum capacity and required standards.

We offer service facilities nationwide allowing us to deliver local support fast, to ensure your equipment is running at optimum performance.

SERVICE AGREEMENTS

TRAINING AND TECHNICAL SUPPORT

PREVENTATIVE MAINTENANCE PROGRAMS

INSTALLATION

LOAN EQUIPMENT

ON SITE COMMISSIONING ASSISTANCE

BREAKDOWN SERVICE

HEAT EXCHANGER SERVICING

HEAT EXCHANGER TESTING AND CERTIFICATION

PROCESS VALVE SERVICING

PUMP SERVICING





Matrix has engineered the total service concept. Our projects division assists in the design, delivery and ongoing support of the Matrix range of products.

Consulting

Assessing requirements and building solutions

Engineering

Design and construction of the solution to specification

Supply

Product required onsite on time

Install and commission

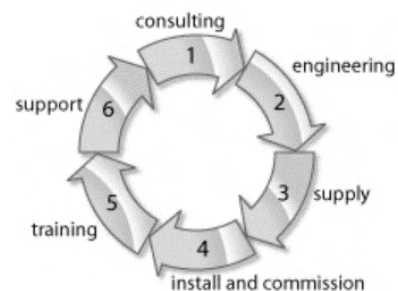
Onsite work and startup

Training

Handover and training to site personnel

Support

After commissioning advice and onsite support



Project manage the installation of a new Alfa Vap process.



Project manage the installation of a new process.



System Design and installation of new product transfer and storage process.



Designed and Installed new Yoghurt processing facility.



Designed and Installed complete process, incorporating a full product recovery system to maximise product yield and control effluent discharge.

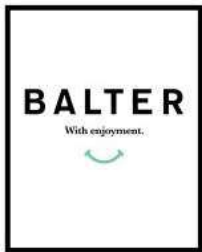


Designed and Installed of 12 x Toftejorg TZ 79 cleaning heads into Steeping Vessels.



Designed and Installed new Mixproof valve manifold





Designed and installed a new wort chilling process to reduce wort knockout times by 10-20%.



Designed and installed milk receive system and increased capacity of the milk processing plant through design and automation upgrades.



Design and Installation of new product receive and distribution system. Incorporating a LIAG product recovery (pigging) system and CIP skid.





Design and Install product distribution system using new Alfa Laval OS twin screw pumps and LIAG product recovery system.



Project Management services. Managed the installation of a new Yeast Propagation Plant at brewery client. Full ground up project management.



MATRIX CUSTOMISED PRODUCTS

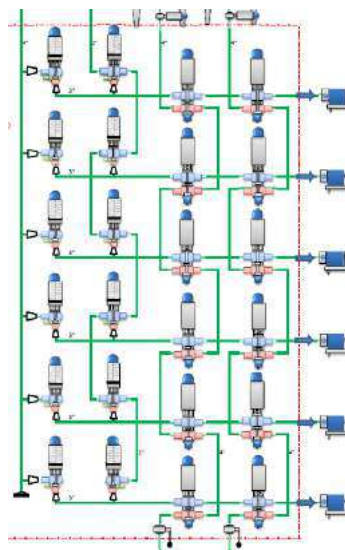
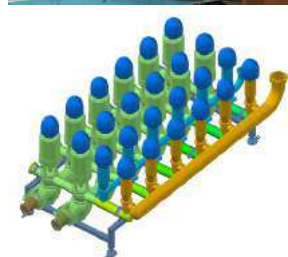
VALVE MANIFOLD DESIGN AND CONSTRUCT

DRUM UNLOADING SYSTEM

ELECTRIC ACTUATION

MOBILE FLOW METER / TROLLEY ASSEMBLY

CUSTOM PUMP BUILDS TO YOUR NEEDS



CUSTOM SOLUTIONS USING THE BEST OF THE BEST



VALVE MANIFOLD DESIGN AND CONSTRUCT

DRUM UNLOADING SYSTEM

ELECTRIC ACTUATION

MOBILE FLOW METER / TROLLEY ASSEMBLY

CUSTOM PUMP BUILDS TO YOUR NEEDS



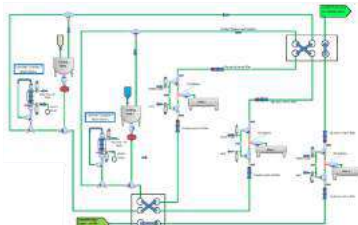
VALVE MANIFOLD DESIGN AND CONSTRUCT



HOT WATER SKIDS



PRODUCT
RECOVERY
SYSTEM
DESIGN



OUTPHASED PRODUCTS

WE MIGHT BE ABLE TO ASSIST WITH SPARE PARTS



SMP-TO VALVES



SMP-EC VALVES



SMP-SC-SF VALVES



SRC VALVES



SMP-SC VALVES



ALC SERIES PUMPS



PLUG COCK VALVES



LKTN Top Unit



THINKTOP



THINKTOP BASIC



761 VALVES



Mainstream filters



Tri-Clover C SERIES PUMPS



371 VALVES



Fristam FPE 742



Fristam FPE 712, 722

FPE 3522
FPE 3532
FPE 3542
FPE 3552

CREDIT APPLICATION

Matrix Process Solutions Pty. Ltd.

ABN: 28 097 144 897

ACN: 097 144 897



Trading Name _____

ACN Number _____ ABN Number _____

PH Number _____ Fax Number _____

Email (Invoices) _____

Email (Statements) _____

POSTAL ADDRESS _____

_____ POST CODE _____

DELIVERY ADDRESS _____

_____ POST CODE _____

Names & Details of Partners, Sole Trader or Directors

1. _____ 3. _____

2. _____ 4. _____

BANK _____ BRANCH _____

BSB # _____ ACCOUNT NUMBER _____

Trade References

NAME	PHONE #	FAX #
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

1. I am aware that trading terms are **STRICTLY NET THIRTY (30) DAYS** and will undertake to make payment within thirty (30) days from date of invoice.

2. To the best of my knowledge, all information provided is correct at the time of writing, and we will inform Matrix Process Solutions Pty. Ltd. of any changes.

3. I/we accept the conditions of trade set down by Matrix Process Solutions Pty. Ltd.

4. I/we understand that all products supplied by Matrix Process Solutions Pty. Ltd. remain the property of Matrix Process Solutions Pty. Ltd. until payment has been made in full.

Signed _____ Position _____

Print Name _____ Date _____

TERMS OF SALE

TERMS OF PAYMENT

Terms of payment are as specified in the quotation.

If terms of payment are not specifically stated to be otherwise, they are strictly net thirty (30) days following the month of invoice.

Deposits may be requested/required for projects, special builds or other nonstandard works, and will be otherwise detailed in the quotation, as either a percentage (%) of the total quotation price or a dollar value not more than 50% of the orders value, which is payable at the time of order placement.

Projects of significant value will require not only the payment of deposits before their commencement thereof, but shall also include progress payments based on the value of work completed when requested by Matrix Process Solutions.

Goods returned will be subject to a re-stocking fee.

Special builds are non-returnable.

PRICES

Prices are firm for thirty (30) days unless stated otherwise.

Prices do not include any Federal, State or Local Sales or GST Tax, which will apply to sales as required by law.

All prices are F.O.B. your local Matrix Process Solutions Sales office, unless stated otherwise.

Goods may be subject to currency fluctuations, and rights are reserved to amend quotations due to unforeseen fluctuations less than thirty (30) days from the date of the quotation.

Typographical and stenographic errors are subject to correction without penalty.

DELIVERY

All shipping and delivery dates are tentative based on current equipment availability and factory loadings.

Transport costs will be charged on all deliveries unless the purchaser specifies their own choice of freight forward carrier.

All goods become the purchasers sole responsibility once loaded on any freight carrier ex a Matrix Process Solutions location.

Matrix Process Solutions is not responsible for damages or losses due to delays of any cause.

CHANGES

Notice and changes in orders must be made and confirmed in writing.

Penalties may apply for special build materials and work in progress equipment.

INSPECTION OF EQUIPMENT

Upon arrival of the components and/or equipment at the purchasers facilities, or at any other place at which the purchaser has ordered the equipment delivered in accordance with the order, the purchaser shall immediately inspect the equipment and shall give written notice to Matrix Process Equipment within five days after arrival of the equipment of any claim that the equipment does not conform with the specifications or the terms of the order.

RETURNS

Orders accepted by the customer cannot be returned without prior written consent from an authorized individual of Matrix Process Solutions Pty Ltd.

All returns will be subject to a minimum 25% Restocking Charge.

Special builds are non-returnable and non-refundable.

Shipping charges on authorised returns are to be prepaid by the Customer unless otherwise specified, otherwise freight costs will be deducted from any credit amounts issued by Matrix Process Solutions to the customer.

CANCELLATIONS

In the event this quotation results in an order which is cancelled or terminated by the customer, the customer agrees to pay to Matrix Process Solutions an amount in cash equal to 20% of the total price of the order or contract, plus the actual cost of labour, materials, overhead and related direct costs and expenses incurred by Matrix Process Solutions in connection with the order, it being impossible to ascertain or estimate the entire or exact cost, damage or injury which Matrix Process Solutions may sustain by reasons of cancellation, and such sum is agreed to as reasonable compensation and not as a penalty.

LIMIT OF LIABILITY

Matrix Process Solutions is not liable or responsible for any loss, damage, injury to person or property or any direct or consequential damage arising from sale, installation, or use of any components or equipment it supplies.

Matrix Process Solutions shall not be held liable for any losses or damages to the customer resulting from the improper operation, care or cleaning of any equipment it supplies.

Matrix Process Solutions is not liable for any damage to process or product due to failure of the any equipment, component or service work it supplies or conducts on behalf of the client.

TITLE

In the event the customer fails to pay as agreed in the purchase contract, Matrix Process Solutions shall have the right to immediate possession of the property and to enter upon

the premises where the property may be located and remove same, while also reserving the right to deduct costs associated with recovery, manufacture and shipping to and from the client, from any deposit or monies paid by the client.

Title of any and all goods supplied by Matrix Process Solutions does not pass to the customer until the agreed purchase contract price has been paid in full.

WARRANTY

Matrix Process Solutions Pty Ltd, warrants to the original purchaser that equipment of its many manufacturing principals including but not limited to Alfa Laval, ABB Motors, Keofitt, Murzan, LAUFER International (LIAG), Ampco Pumps, Pipetite, MCD, Gemu and SSP Pumps, is free from defects in material and workmanship for a period of one (1) year from date of shipment.

Matrix Process Solutions guarantees to repair or replace at its choice, F.O.B. a Matrix Location, any such equipment found to be defective, provided written notice of the alleged defect is received within one year from date of shipment.

Excluded from the foregoing guarantee are damages caused by ordinary wear and tear, erosion and corrosion, or by misuse, abuse or improper handling by the purchaser or any third party.

Matrix Process Solutions Pty Ltd makes no additional warranties, expresses or implied, whether of merchantability, fitness for purpose, or otherwise, other than that stated above.

Matrix Process Solutions Pty Ltd, shall not be responsible for any indirect special or consequential damages, nor for any other claims arising out of the sale or use of its equipment, beyond the remedy as stated above.

Equipment, parts or accessories manufactured by any of Matrix Process Solutions Manufacturing Principals carry the guarantee of the manufacturer only.

Any warranties or claims which differ from the foregoing are unauthorized by Matrix Process Solutions Pty Ltd and become the warranty safety of the party making them, unless specifically authorized in writing by an officer of Matrix Process Solutions Pty Ltd. Should any provision of the foregoing be held ineffective, the remaining provisions shall continue in full force and effect.

EXCLUSIONS, EXTRAS AND OPTIONS

Installation, rigging, mounting, erection, electrical and pneumatic installation, and start up commissioning are not included unless specifically stated otherwise in the quotation.

Site restrictions which contribute toward additional service hours, requirements for site inductions, crainage and additional cartage on site, spare parts not specified in the quotation but required to return units to operational duty during serving, along with any other unspecified parts, delay, components or services requested by the client on site, will be charged as extras to the clients account, and commencement of any site work by Matrix Process Solutions Pty Ltd will constitute acceptance by the client of the terms as specified above.

Supervisory assistance is available at extra cost for installation, erection, or start up commissioning at current Matrix Process Solution rates, plus all travel and living expenses, unless stated otherwise in the quotation.

RISK OF LOSS

Matrix Process Solutions Pty Ltd shall not be liable for damages arising from its failure to make or delay in making delivery because of fire, flood, strikes, riots, embargoes on freight of any government, accidents, insurrections, lockouts, breakdown of machinery, loss or damage of goods in transit, Acts of God, or any other circumstances or unavoidable cause beyond the control of Matrix Process Solutions Pty Ltd.

In no case shall Matrix Process Solutions be responsible for any liability, loss or damage after delivery of the equipment in good order and condition to the carrier or carriers at any point of shipment.

In no case shall Matrix Process Solutions be responsible for any loss of production, loss of profits or loss of product arising from any process design or installation it undertakes, unless specifically agreed to in a process, construction and contract brief signed by all parties prior to such work being undertaken.

GENERAL

These terms and conditions of sale cannot be supplemented or altered by any language contained in any purchase order or other customer's document unless accepted in writing by Matrix Process Solutions Pty Ltd.

The sale shall be governed by, constructed and interpreted in accordance with, the laws of the State of Queensland, Australia, and the buyer hereby submits to the non-exclusive jurisdiction of the courts of Queensland, and waives any objection due to the lack of jurisdiction thereof.

INTELLECTUAL PROPERTY

Goods offered for sale by Matrix Process Solutions may be subject of patents, registered designs, trademarks, copyright or other proprietary and legal protection, and shall not be copied or reproduced in part or whole by the purchaser for whatever reason.

All programs, operating systems, drawings, designs, calculations and any other proprietary information used during the construction, design, concept planning, process trials or any other activity relating to the business of Matrix Process Solutions Pty Ltd, remains the property of Matrix Process Solutions Pty Ltd, and the purchaser warrants that they shall not attempt to copy, alter, reproduce, extend, adjust or otherwise interfere with such programs or operating systems, without the payment of a licence fee to Matrix Process Solutions Pty Ltd.



20
YEARS

MATRIX

Process Solutions

