

Product range

SYGEF Ultra

Redefining purity



System Range

SYGEF Ultra, our advanced ultrapure water transport solution, is designed to surpass purity standards by decreased rinsing times. Addressing today's and tomorrow's industry challenges of the Ångström era by enabling the efficient transport of (H)UPW — across OEM systems, distribution loops, and tool hook-ups — for next-generation process technologies below 10 nm and approaching physical limits.

SYGEF Ultra (PEEK-HP) Portfolio

	d20	d25	d32	d50	d63	d90	d110	d160
Pipe								
Elbow 90°								
Bend 90°								
Elbow 45°								
Tee 90°								
Flange Adapter (ISO, ASTM, JIS)								
Reducer concentric								
Union								
Flare fitting 1/4" - 1"								
Endcap								
Endcap tappable ("thick")								
Sanitary adapter								
Installation fitting								
Female adapter (Rp, NPT)								
Fixpoint fitting								
Diaphragm Valve 512 (2-way)								
Diaphragm Valve 519 (3-way)								
O-Ring								
IR-63 P								
IR-160 P								
Packaging								

Available

System Specification

Reference values

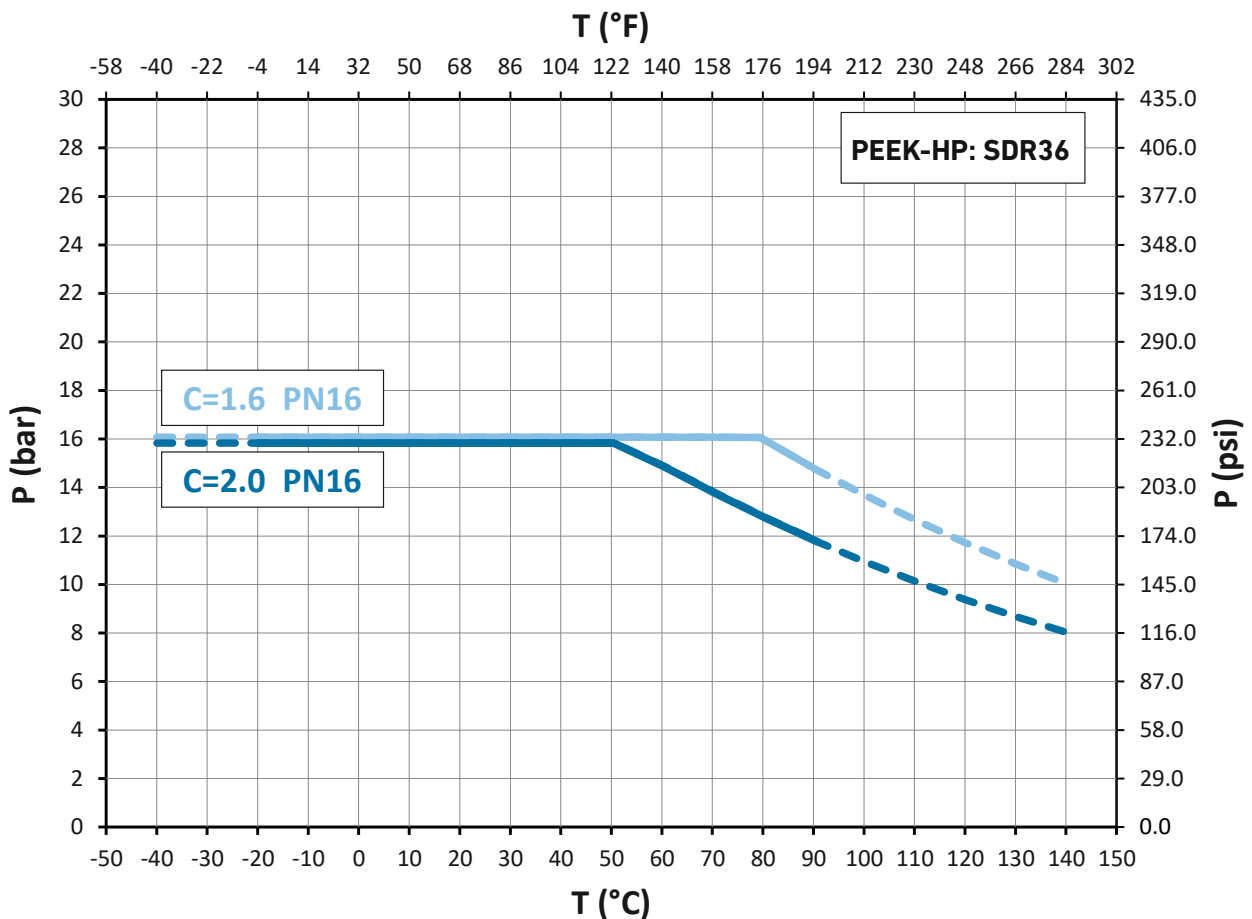
Property	Value ¹	Units	Test standard
Density	1.30	g/cm ³	EN ISO 1183-1
Yield stress ²	≥ 94	N/mm ²	EN ISO 527-1
Tensile modulus ²	≥ 3'700	N/mm ²	EN ISO 527-1
Charpy notched impact strength ²	≥ 8	kJ/m ²	EN ISO 179-1/1eA
Heat distortion temperature HDT A 1.80 MPa	≥ 157 ≥ 315	°C °F	EN ISO 75
Melting point	≥ 340 ≥ 644	°C °F	ASTM D3418
Thermal conductivity ²	0.19	Btu-in./h-ft ² -°F	ASTM E1530
Water absorption ² / 24 h	≤ 0.1	%	ASTM D570
Color	Natural		
Limiting oxygen index (LOI)	≥ 36.8	%	ASTM D2863

¹ Typical characteristics measured at the material should not be used for calculations.

² At 23 °C (73.4 °F)

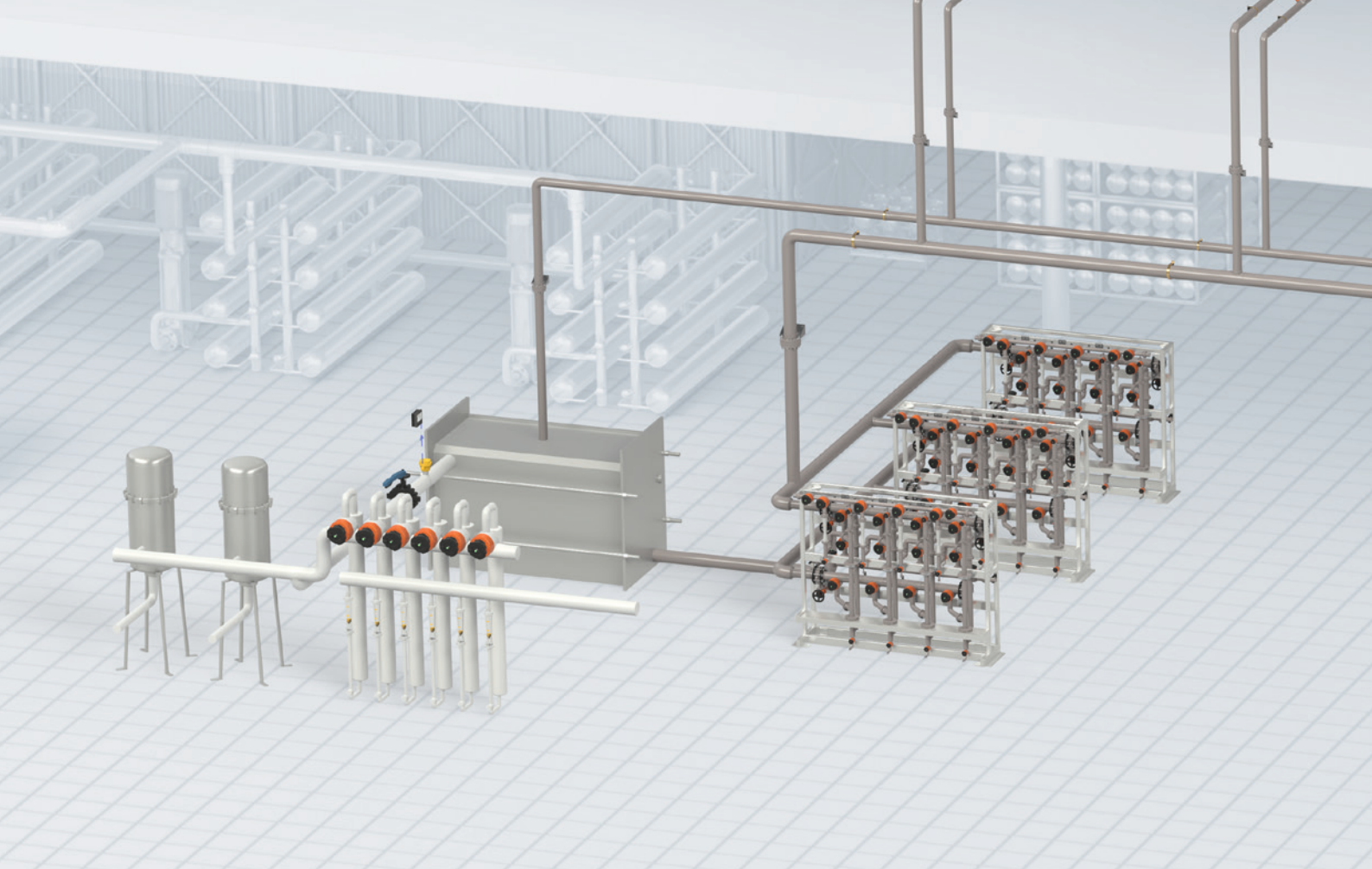
Pressure/Temperature Diagrams

The following pressure-temperature diagrams for PEEK-HP pipe and fittings are valid for an expected service life of 25 years. The design factor of 2.0 recommended by GF Piping Systems has been incorporated. The pressure-temperature curves are valid for water or media resembling water, in other words, media that have no reduction factor for chemical resistance. The long-term welding factor f_s (or long-term joining factor) must be taken into account if relevant (e.g. stress check in longitudinal direction).



Please take into account the pressure-temperature diagrams for valves and special fittings. Because of the construction and/or sealing material used, differences are possible when compared to pipe and fittings. More information is available in the Planning Fundamentals of the relevant types of valves and special fittings.

In case of operating in the temperature range shown in dotted lines, contact your authorized GF representative.



SYGEF Ultra

Redefining purity

Advanced Piping Solution for next-generation (H)UPW
transport in Semiconductors (<10nm)



~80% Faster Rinse-up

Far exceeds SEMI F123 standards with 6x faster rinse-up to SEMI F63 levels for Fluoride and 10x faster rinse-up to SEMI F63 levels for TOC*.



PEEK-HP a non-PFAS* material

Excellent leach-out properties: TOC, anionic, and cationic leach-out, as well as smooth surface finishes.

* For additional details on PFAS definition, please refer to
www.gfps.com/sygef-ultra



Learn more about testing and
get in contact with our experts
gfps.com/sygef-ultra

Redefining project efficiency

At GF, we understand that every project is unique, and trust is at the heart of every successful partnership. Our integrated approach minimizes project risks and ensures traceability across all components. We manage the entire supply chain process from raw materials to final pre-fabricated components, passing by the operation of extrusion and injection molding factories and GF-owned pre-fabrication facilities across the globe. All while optimizing logistics for our customers as efficiently as possible.

+ 3+ Pre-fabrication facilities

for SYGEF Ultra worldwide for rapid delivery and minimal transport costs.

+ Connected knowledge

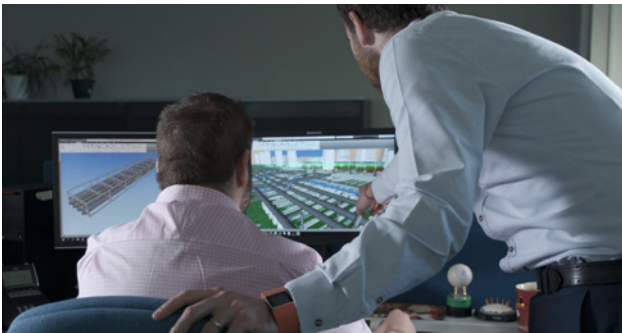
Seamless global collaboration for over 20 years of engineering and fabrication facilities.

+ Scalability of solutions

Quick ramp-up of project-focused locations.

+ Dedicated ISO 7 (Class 10.000) cleanrooms

Fastest commissioning of ultrapure water solutions.



Proposal and Detail Engineering Solutions

GF provides a comprehensive range of engineering services as well as pre-fabricated solutions designed to streamline installation, ensure quality, and enhance efficiency across industries. From the early steps of design to the assembly of customized fittings or fully integrated modular skids, our engineering and pre-fabrication capabilities offer ready-to-install solutions that minimize on-site work and accelerate project execution.



Pre-fabricated Solutions

GF's global network of pre-fabrication facilities enables industrial project owners to accelerate timelines without compromising on quality. Our assemblies, built in controlled environments by certified fabricators, arrive ready to install, reducing onsite labor, installation time, and logistical complexity. By integrating pre-fabrication early in the planning phase, our customers gain greater control over quality, cost, and timelines.



Learn more about our
Design & Pre-fabricated Solutions
gfps.com/design-prefab

Product range

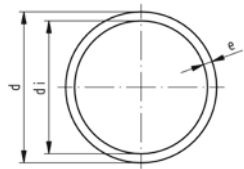
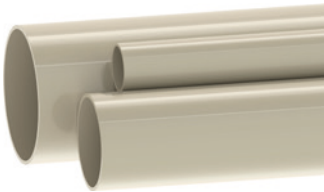
SYGEF Ultra



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SYGEF Ultra Pipes



SYGEF Ultra Pipe
PN16
High Purity clean-room product ISO Class 5

- Model:**
- Material: PEEK-HP
 - Pipe length: 5000mm

d	DN	PN	Code	Weight	di	e	FM
(mm)	(mm)	(bar)		(kg/m)	(mm)	(mm)	
20	15	16	176 481 006	0.142	16.2	1.9	IR
25	20	16	176 481 007	0.182	21.2	1.9	IR
32	25	16	176 481 008	0.237	28.2	1.9	IR
50	40	16	176 481 010	0.474	45.2	2.4	IR
63	50	16	176 481 011	0.603	58.0	2.5	IR
90	80	16	176 481 013	1.013	85.0	2.5	IR
110	100	16	176 481 014	1.503	103.8	3.1	IR
160	150	16	176 481 017	3.152	151.0	4.5	IR

SYGEF Ultra Fittings



SYGEF Ultra Bend 90°

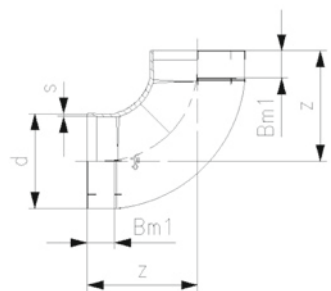
PN16

High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP

d	DN	PN	Code	Weight	Bm1	FM	s	Z
(mm)	(mm)	(bar)		(kg)	(mm)		(mm)	(mm)
90	80	16	736 018 013	0.216	26.0	IR	2.5	105
110	100	16	736 018 014	0.371	29.9	IR	3.1	125
160	150	16	736 018 017	1.124	38.9	IR	4.5	180



SYGEF Ultra Elbow 90°

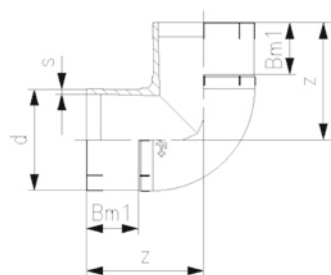
PN16

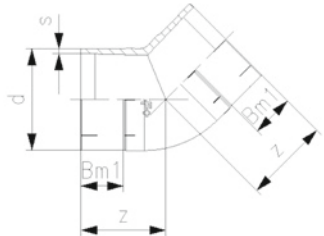
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP

d	DN	PN	Code	Weight	Bm1	FM	s	Z
(mm)	(mm)	(bar)		(kg)	(mm)		(mm)	(mm)
20	15	16	736 108 006	0.012	22.1	IR	1.9	38
25	20	16	736 108 007	0.018	23.6	IR	1.9	42
32	25	16	736 108 008	0.025	24.1	IR	1.9	46
50	40	16	736 108 010	0.063	25.6	IR	2.4	58
63	50	16	736 108 011	0.095	27.1	IR	2.5	66



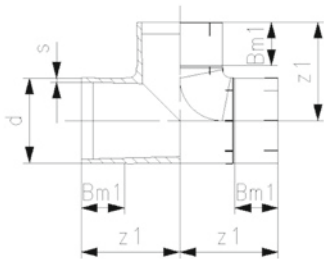


**SYGEF Ultra Elbow 45°
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP

d (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	Bm1 (mm)	FM	s (mm)	Z (mm)
20	15	16	736 158 006	0.016	21.0	IR	1.9	32
25	20	16	736 158 007	0.015	21.0	IR	1.9	34
32	25	16	736 158 008	0.020	21.0	IR	1.9	36
50	40	16	736 158 010	0.047	21.0	IR	2.4	42
63	50	16	736 158 011	0.070	25.0	IR	2.5	47
90	80	16	736 158 013	0.126	34.4	IR	2.5	57
110	100	16	736 158 014	0.236	42.3	IR	3.1	70
160	150	16	736 158 017	0.716	59.8	IR	4.5	100

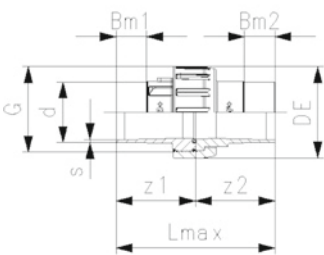


**SYGEF Ultra Tee 90°
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP

d (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	Bm1 (mm)	FM	s (mm)	z1 (mm)
20	15	16	736 208 006	0.018	22.1	IR	1.9	38
25	20	16	736 208 007	0.025	23.6	IR	1.9	42
32	25	16	736 208 008	0.036	24.1	IR	1.9	46
50	40	16	736 208 010	0.088	25.6	IR	2.4	58
63	50	16	736 208 011	0.132	27.1	IR	2.5	66
90	80	16	736 208 013	0.281	33.0	IR	2.5	90
110	100	16	736 208 014	0.520	41.0	IR	3.1	110
160	150	16	736 208 017	1.612	62.0	IR	4.5	160



**SYGEF Ultra Union
PN16**
High Purity clean-room product ISO Class 5
FKM

Model:

- Material: PEEK-HP

d (mm)	DN (mm)	PN (bar)	FKM Code	Weight (kg)
20	15	16	736 528 006	0.051
25	20	16	736 528 007	0.075
32	25	16	736 528 008	0.097
50	40	16	736 528 010	0.195
63	50	16	736 528 011	0.275

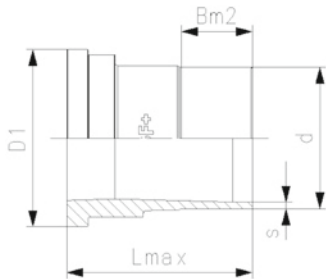
d	Bm1	Bm2	DE	FM	G	Lmax	O-Ring FKM	O-Ring	s	z1	z2
(mm)	(mm)	(mm)	(mm)		(mm)	(mm)			(mm)	(mm)	(mm)
20	21	21	40.3	IR	G1"	106	749411005	2.62x15.54	1.9	50.0	50.0
25	25	25	49.3	IR	G 1 1/4"	112	749411006	3.53x20.22	1.9	53.0	53.0
32	25	25	55.4	IR	G 1 1/2"	118	749411120	3.53x26.58	1.9	56.0	56.0
50	25	25	75.5	IR	G 2 1/4"	131	749411172	3.53x44.04	2.4	62.5	62.5
63	25	25	90.5	IR	G 2 3/4"	137	749411054	4.00x55.00	2.5	65.5	62.5



**SYGEF Ultra Union End
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP



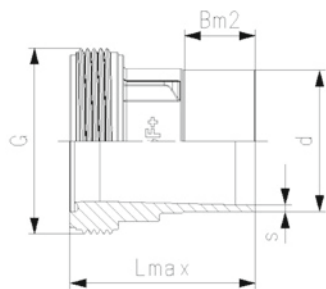
d	PN	Code	Weight	D1	s	FM	Lmax	Bm2
(mm)	(bar)		(kg)	(mm)	(mm)		(mm)	(mm)
20	16	736 608 006	0.015	30	1.9	IR	53	21
25	16	736 608 007	0.023	39	1.9	IR	56	25
32	16	736 608 008	0.031	45	1.9	IR	59	25
50	16	736 608 010	0.062	63	2.4	IR	65	25
63	16	736 608 011	0.092	78	2.5	IR	68	25



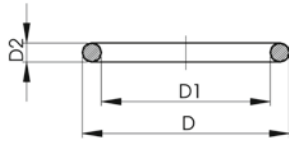
**SYGEF Ultra Union Bush
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP



d	PN	Code	Weight	s	FM	G	Lmax	Bm2
(mm)	(bar)		(kg)	(mm)		(mm)	(mm)	(mm)
20	16	736 648 006	0.019	1.9	IR	G1"	53	21
25	16	736 648 007	0.028	1.9	IR	G 1 1/4"	56	25
32	16	736 648 008	0.038	1.9	IR	G 1 1/2"	59	25
50	16	736 648 010	0.072	2.4	IR	G 2 1/4"	65	25
63	16	736 648 011	0.108	2.5	IR	G 2 3/4"	68	25



O-ring FKM white
For unions with gap filling O-ring positioning
High Purity clean-room product ISO Class 5 (100)

Model:

- For unions with gap filling O-ring position
- Hardness approx. 65° Shore
- FKM white min. temperature -15°C

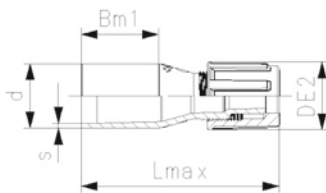
d (mm)	DN (mm)	FKM Code	Weight (kg)	D (mm)	D1 (mm)	D2 (mm)
20	15	749 411 005	0.002	20.6	15.5	2.62
25	20	749 411 006	0.002	27.3	20.2	3.53
32	25	749 411 120	0.002	33.6	26.6	3.53
50	40	749 411 172	0.003	51.1	44.0	3.53
63	50	749 411 054	0.003	63.0	55.0	4.00
90	80	749 411 014	0.000	92.6	81.9	5.33
110	100	749 411 015	0.000	117.0	101.0	5.33



SYGEF Ultra Flare Transition Fitting
PN16
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP



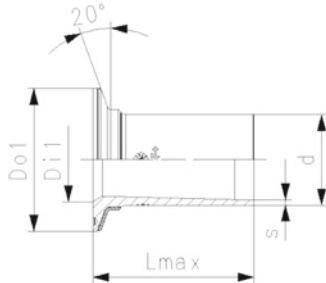
d (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	Bm1 (mm)	DE2 (mm)	FM	Lmax (mm)	s (mm)	Suitable for
20	15	16	736 598 006	0.015	30.0	20.5	IR	74.6	1.9	1/4" Inch
25	20	16	736 598 007	0.017	30.0	20.5	IR	74.6	1.9	1/4" Inch
20	15	16	736 598 016	0.017	30.0	23.1	IR	76.2	1.9	3/8" Inch
25	20	16	736 598 017	0.019	30.0	23.1	IR	76.2	1.9	3/8" Inch
25	20	16	736 598 026	0.019	30.0	26.2	IR	76.5	1.9	1/2" Inch
20	15	16	736 598 027	0.021	30.0	26.2	IR	76.5	1.9	1/2" Inch
32	25	16	736 598 028	0.024	30.0	26.2	IR	76.5	1.9	1/2" Inch
20	15	16	736 598 036	0.033	29.7	33.8	IR	77.6	1.9	3/4" Inch
25	20	16	736 598 037	0.030	30.0	33.8	IR	77.6	1.9	3/4" Inch
32	25	16	736 598 038	0.032	30.0	33.8	IR	77.6	1.9	3/4" Inch
25	20	16	736 598 047	0.066	30.3	45.7	IR	87.3	1.9	1" Inch
32	25	16	736 598 048	0.060	30.3	45.7	IR	87.3	1.9	1" Inch



SYGEF Ultra Sanitary Adapter DIN 32676
PN16
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP
- With stainless steel reinforcement



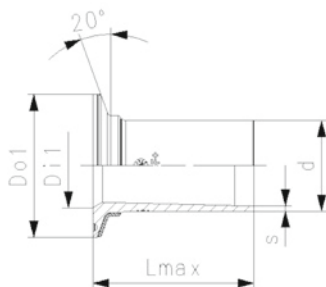
d	DN	PN	Code	Weight	Do1	Di1	FM	Lmax	s
(mm)	(mm)	(bar)		(kg)	(mm)	(mm)		(mm)	(mm)
20	15	16	736 598 056	0.016	34.0	16.20	IR	50	1.9
20	20	16	736 598 057	0.015	34.0	20.00	IR	50	1.9
25	25	16	736 598 059	0.037	50.5	26.00	IR	55	1.9
32	32	16	736 598 062	0.036	50.5	31.65	IR	57	1.9
50	50	16	736 598 067	0.063	64.0	50.00	IR	68	2.4



SYGEF Ultra Sanitary Adapter ISO 1127
PN16
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP
- With stainless steel reinforcement



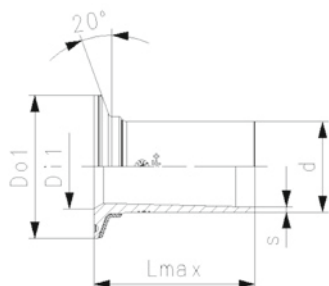
d	DN	PN	Code	Weight	Do1	Di1	FM	Lmax	s
(mm)	(mm)	(bar)		(kg)	(mm)	(mm)		(mm)	(mm)
20	15	16	736 598 106	0.037	50.5	18.10	IR	50	1.9
25	20	16	736 598 108	0.000	50.5	23.35	IR	55	1.9
25	25	16	736 598 109	0.036	50.5	29.70	IR	55	1.9
32	25	16	736 598 110	0.037	50.5	29.55	IR	57	1.9
50	40	16	736 598 116	0.064	64.0	44.30	IR	68	2.4
63	50	16	736 598 118	0.084	77.5	56.30	IR	71	2.4



**SYGEF Ultra Sanitary Adapter ASME BPE
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP
- With stainless steel reinforcement
- * Model without stainless reinforcement



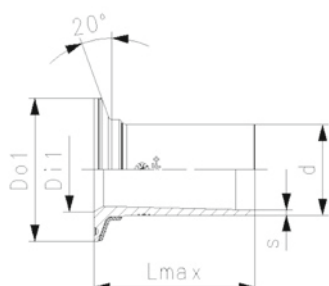
Remarks	d (mm)	DN (mm)	Size (inch)	PN (bar)	Code	Weight (kg)	Do1 (mm)	Di1 (mm)	FM	Lmax (mm)	s (mm)
*	20	15	3/4	16	736 598 357	0.010	25.0	16.20	IR	50	1.9
	25	20	1	16	736 598 359	0.038	50.5	22.35	IR	55	1.9
	32	25	1 1/2	16	736 598 362	0.036	50.5	34.85	IR	57	1.9
	50	40	1 1/2	16	736 598 367	0.063	64.0	47.65	IR	68	2.4
	63	50	2	16	736 598 369	0.082	77.5	59.90	IR	71	2.5



**SYGEF Ultra Sanitary Adapter PEEK JIS
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP
- With stainless steel reinforcement



d (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	Do1 (mm)	Di1 (mm)	FM	Lmax (mm)	s (mm)
20	15	16	736 598 806	0.036	50.5	16.70	IR	50	1.9
25	20	16	736 598 807	0.038	50.5	19.90	IR	55	1.9
32	25	16	736 598 808	0.037	50.5	25.60	IR	57	1.9
50	40	16	736 598 810	0.064	64.0	42.20	IR	68	2.4
63	50	16	736 598 811	0.084	77.5	55.10	IR	71	2.5

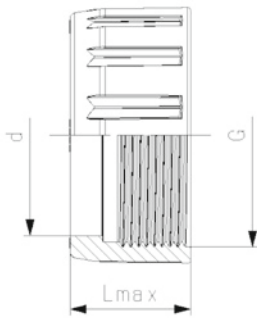


SYGEF Ultra Union Nut
PN16
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP

d (mm)	PN (bar)	Code	Weight (kg)	FM	G (mm)	Lmax (mm)
20	16	736 690 006	0.015	IR	G1"	23.5
25	16	736 690 007	0.021	IR	G 1 1/4"	25.5
32	16	736 690 008	0.027	IR	G 1 1/2"	27.5
50	16	736 690 010	0.059	IR	G 2 1/4"	35.5
63	16	736 690 011	0.074	IR	G 2 3/4"	38.5

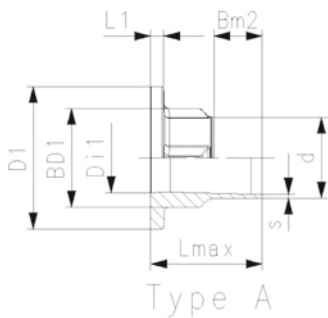


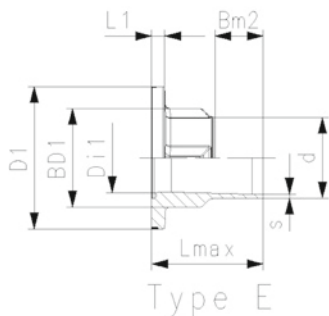
SYGEF Ultra Flange Adaptor JIS
PN16
High Purity clean-room product ISO Class 5
Jointing face flat

Model:

- Material: PEEK-HP

d (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	BD1 (mm)	D1 (mm)	Di1 (mm)	s (mm)	FM	Lmax (mm)	L1 (mm)	Type
20	15	16	736 805 006	0.016	27	34	15	1.9	IR	54	6	A
25	20	16	736 805 007	0.023	33	41	20	1.9	IR	56	7	A
32	25	16	736 805 008	0.032	40	50	26	1.9	IR	58	7	A
50	40	16	736 805 010	0.075	61	73	44	2.4	IR	69	8	A
63	50	16	736 805 011	0.114	76	90	54	2.5	IR	72	9	A
90	80	16	736 805 013	0.210	105	125	78	2.5	IR	81	12	A
110	100	16	736 805 014	0.311	125	150	97	3.1	IR	82	13	A



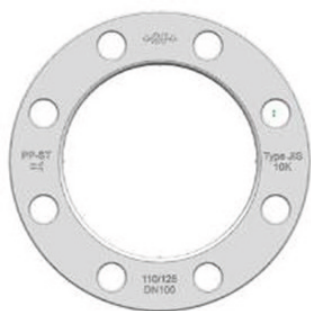


**SYGEF Ultra Flange Adaptor JIS GR
PN16**
High Purity clean-room product ISO Class 5
Joining face with O-Ring groove

Model:

- Material: PEEK-HP

d	DN	PN	Code	Weight	BD1	D1	Di1	s	FM	Lmax	L1	Type	Bm2
(mm)	(mm)	(bar)		(kg)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)		(mm)
20	15	16	736 805 206	0.016	27	34	15	1.9	IR	54	6	E	30
25	20	16	736 805 207	0.022	33	41	20	1.9	IR	56	7	E	30
32	25	16	736 805 208	0.031	40	50	26	1.9	IR	58	7	E	35
50	40	16	736 805 210	0.073	61	73	44	2.4	IR	69	8	E	30
63	50	16	736 805 211	0.111	76	90	54	2.5	IR	72	9	E	35
90	80	16	736 805 213	0.199	105	125	78	2.5	IR	81	12	E	35
110	100	16	736 805 214	0.299	125	150	97	3.1	IR	82	13	E	35

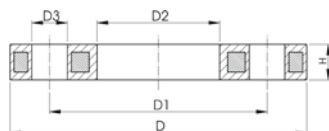


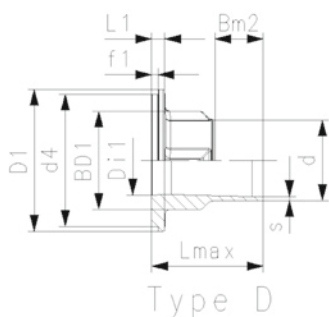
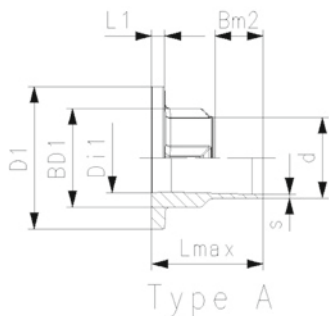
Backing flange PP-Steel JIS
For butt fusion system metric

Model:

- Material: PP with glass-fibre reinforcement and steel insert
- Connecting dimensions: JIS B 2220, 10K
- AL: Number of bolt holes
- PN 10K

d	DN	Code	Weight	D	D1	D2	D3	H	AL	M
(mm)	(mm)		(kg)	(mm)	(mm)	(mm)	(mm)	(mm)		
20	15	727 705 206	0.261	95	70	28	15	12	4	M12
25	20	727 705 207	0.285	100	75	34	15	12	4	M12
32	25	727 705 208	0.559	125	90	42	19	16	4	M16
50	40	727 705 210	0.901	140	105	62	19	20	4	M16
63	50	727 705 211	1.072	155	120	78	19	20	4	M16
90	80	727 705 213	1.320	185	150	108	19	20	8	M16
110 - 125	100	727 705 214	1.650	210	175	135	19	24	8	M16
160	150	727 705 216	4.030	280	240	178	22	24	8	M20





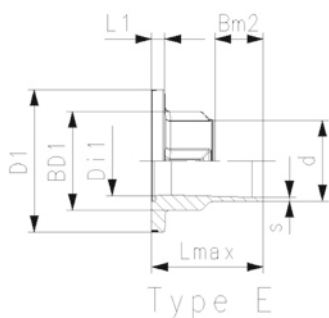
SYGEF Ultra Flange Adaptor flat
PN16
High Purity clean-room product ISO Class 5
Jointing face flat

Model:

- Material: PEEK-HP

d	DN	PN	Code	Weight
(mm)	(mm)	(bar)		(kg)
20	15	16	736 798 006	0.022
25	20	16	736 798 007	0.033
25	20	16	736 798 557	0.031
32	25	16	736 798 008	0.046
32	25	16	736 798 558	0.043
50	40	16	736 798 010	0.091
50	40	16	736 798 560	0.087
63	50	16	736 798 011	0.135
90	80	16	736 798 013	0.246
90	80	16	736 798 563	0.235
110	100	16	736 798 014	0.343
160	150	16	736 798 017	0.662

d	DN	PN	BD1	D1	Di1	s	FM	Lmax	L1	Type	Standard	Bm2	d4	f1
(mm)	(mm)	(bar)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)			(mm)	(mm)	(mm)
20	15	16	27	45	15	1.9	IR	54	6	A	ISO/ANSI	30		
25	20	16	33	58	20	1.9	IR	56	7	D	ISO	30	54	4
25	20	16	33	54	20	1.9	IR	56	7	A	ANSI	30		
32	25	16	40	68	26	1.9	IR	58	7	D	ISO	30	63	4
32	25	16	40	63	26	1.9	IR	58	7	A	ANSI	30		
50	40	16	61	88	44	2.4	IR	69	8	D	ISO	30	82	4
50	40	16	61	82	44	2.4	IR	69	8	A	ANSI	30		
63	50	16	76	102	54	2.5	IR	72	9	A	ISO/ANSI	35		
90	80	16	105	138	78	2.5	IR	81	12	D	ISO	35	133	4
90	80	16	105	133	78	2.5	IR	81	12	A	ANSI	35		
110	100	16	125	158	97	3.1	IR	82	13	A	ISO/ANSI	35		
160	150	16	175	212	150	4.5	IR	94	17	A	ISO/ANSI	40		

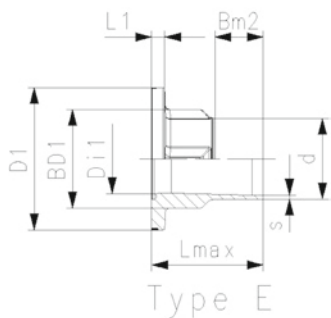


SYGEF Ultra Flange Adaptor groove
PN16
High Purity clean-room product ISO Class 5
Jointing face with O-Ring groove

Model:

- Material: PEEK-HP

d	DN	PN	Code	Weight
(mm)	(mm)	(bar)		(kg)
20	15	16	736 798 206	0.021
25	20	16	736 798 207	0.033
25	20	16	736 798 757	0.030
32	25	16	736 798 208	0.047
32	25	16	736 798 758	0.042
50	40	16	736 798 210	0.093
50	40	16	736 798 760	0.085
63	50	16	736 798 211	0.132
90	80	16	736 798 213	0.240
90	80	16	736 798 763	0.225
110	100	16	736 798 214	0.331
160	150	16	736 798 217	0.630

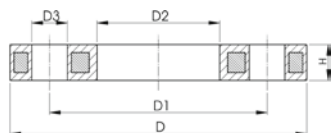
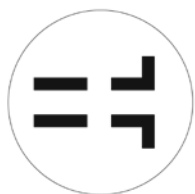


d	DN	PN	BD1	D1	Di1	s	FM	Lmax	L1	Type	Standard	Bm2
(mm)	(mm)	(bar)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)			(mm)
20	15	16	27	45	15	1.9	IR	54	6	E	ISO/ANSI	30
25	20	16	33	58	20	1.9	IR	56	7	E	ISO	30
25	20	16	33	54	20	1.9	IR	56	7	E	ANSI	30
32	25	16	40	68	26	1.9	IR	58	7	E	ISO	30
32	25	16	40	63	26	1.9	IR	58	7	E	ANSI	30
50	40	16	61	88	44	2.4	IR	69	8	E	ISO	30
50	40	16	61	82	44	2.4	IR	69	8	E	ANSI	30
63	50	16	76	102	54	2.5	IR	72	9	E	ISO/ANSI	35
90	80	16	105	138	78	2.5	IR	81	12	E	ISO	35
90	80	16	105	133	78	2.5	IR	81	12	E	ANSI	35
110	100	16	125	158	97	3.1	IR	82	13	E	ISO/ANSI	35
160	150	16	175	212	150	4.5	IR	93	17	E	ISO/ANSI	40

Flanges PP-Steel

Model:

- Material#PP-Steel#30% glass fiber reinforce)
 - Metric: ISO 7005, EN 1092, ISO 9624
 - AL: Number of bolt holes
 - ** Profiled loose flange
- * FM 1613 approved - 15 bar



d	Size	DN	PN	Code	Weight
(mm)	(inch)	(mm)	(bar)		(kg)
20	½	15	16	727 701 206	0.195
20		15	16	727 700 206	0.216
25		20	16	727 700 207	0.279
25	¾	20	16	727 701 207	0.258
32		25	16	727 700 208	0.429
32	1	25	16	727 701 208	0.416
50		40	16	727 700 210	0.722
50	1 ½	40	16	727 701 210	0.803
63	2	50	16	727 700 211	0.900
63		50	16	727 701 211	0.868
90		80	16	727 700 313	1.390
90	3	80	16	727 701 313	1.524
*	110	100	16	724 700 314	1.000
	110	100	16	727 700 314	1.407
	160	6	150	727 700 717	3.840

d	D	D1	D2	D3	AL	Hmax	Standard	M	Design
(mm)	(mm)	(mm)	(mm)	(mm)		(mm)			
20	95	60	28	16	4	12	ASME	M12	Butt/Socket
20	95	65	28	14	4	12	Metric	M12	Butt/Socket
25	105	75	34	14	4	12	Metric	M12	Butt/Socket
25	105	70	34	16	4	12	ASME	M12	Butt/Socket
32	115	85	42	14	4	16	Metric	M12	Butt/Socket
32	115	79	42	16	4	16	ASME	M12	Butt/Socket
50	150	110	62	18	4	20	Metric	M16	Butt/Socket
50	150	98	62	16	4	18	ASME	M16	Butt/Socket
63	165	125	78	18	4	20	Metric	M16	Butt/Socket
63	165	121	78	19	4	18	ASME	M16	Butt/Socket
90	200	160	108	18	8	20	Metric	M16	Butt
90	200	152	108	19	4	20	ASME	M16	Butt
*	110	223	180	18	8	20	Metric	M16	Butt
	110	220	180	18	8	20	Metric	M16	Butt
	160	285	240	178	22	24	Metric/ASME	M20	Butt

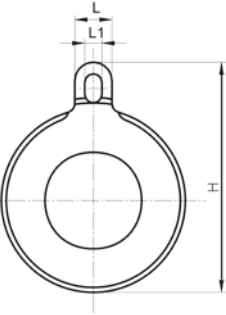
SYGEF Plus Gasket



Model:

- For Use with Steel Flange Rings
- Only for ANSI/ASME
- Non-Returnable/Non-Cancelable

d (mm)	Suitable for	Code	Weight (lb)	H (inch)	L (inch)	L1 (inch)
20	1/2"	731 400 751	0.000	2.76	0.76	0.51
25	3/4"	731 400 753	0.000	2.99	0.79	0.51
32	1"	731 400 755	0.000	3.58	0.98	0.63
50	1 1/2"	731 400 759	0.000	4.33	0.98	0.63
63	2"	731 400 760	0.000	5.04	0.98	0.63
90	3"	731 400 763	0.000	6.34	0.98	0.63
110	4"	731 400 764	0.000	7.44	0.98	0.63
160	6"	731 400 667	0.000	9.61	1.18	0.79



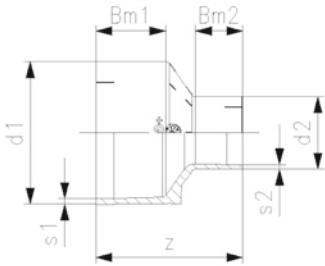
SYGEF Ultra Reducer

PN16

High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP



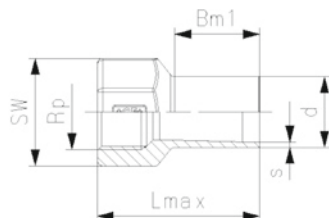
d1 (mm)	d2 (mm)	PN (bar)	Code	Weight (kg)	s1 (mm)	s2 (mm)	FM	Z (mm)	Bm1 (mm)	Bm2 (mm)
25	20	16	736 908 001	0.010	1.9	1.9	IR	55	26.0	21.0
32	20	16	736 908 002	0.013	1.9	1.9	IR	55	26.0	21.0
32	25	16	736 908 003	0.013	1.9	1.9	IR	55	26.0	21.0
50	25	16	736 908 008	0.025	2.4	1.9	IR	60	27.0	21.0
50	32	16	736 908 009	0.026	2.4	1.9	IR	60	27.0	21.0
63	32	16	736 908 013	0.038	2.5	1.9	IR	65	31.0	21.0
63	50	16	736 908 015	0.042	2.5	2.4	IR	65	31.0	21.0
90	50	16	736 908 026	0.066	2.5	2.4	IR	70	33.0	21.0
90	63	16	736 908 027	0.067	2.5	2.5	IR	70	33.0	25.0
110	63	16	736 908 034	0.114	3.1	2.5	IR	85	33.5	25.0
110	90	16	736 908 036	0.116	3.1	2.5	IR	85	33.5	26.0
160	90	16	736 908 053	0.301	4.5	2.5	IR	110	44.5	26.0
160	110	16	736 908 054	0.307	4.5	3.1	IR	110	44.5	28.5



**SYGEF Ultra Adapter Socket female Rp
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP
- IR fusion spigot and parallel female thread Rp
- Connection to plastic thread only
- Avoid installation stresses and large cyclic temperature changes
- Do not use thread sealing pastes harmful to PEEK



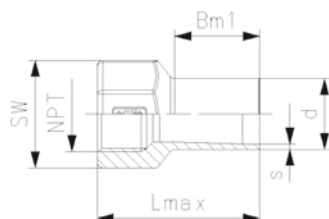
d (mm)	PN (bar)	Code	Weight (kg)	s (mm)	FM	Lmax (mm)	Bm1 (mm)	SW (mm)	Thread Type
20	16	736 910 005	0.024	1.9	IR	53.8	30	32	Rp
20	16	736 910 006	0.021	1.9	IR	53.8	30	32	Rp
25	16	736 910 007	0.031	1.9	IR	57.4	30	38	Rp
32	16	736 910 008	0.054	1.9	IR	62.2	30	48	Rp



**SYGEF Ultra Adapter Socket female NPT
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP
- IR fusion spigot and parallel female thread NPT
- Connection to plastic thread only
- Avoid installation stresses and large cyclic temperature changes
- Do not use thread sealing pastes harmful to PEEK



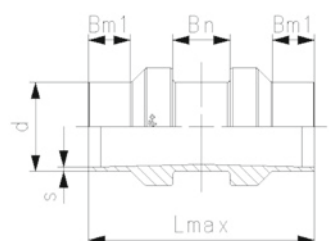
d (mm)	PN (bar)	Code	Weight (kg)	s (mm)	FM	Lmax (mm)	Bm1 (mm)	SW (mm)	Thread Type
20	16	736 914 005	0.024	1.9	IR	53.80	30	32	NPT
20	16	736 914 006	0.021	1.9	IR	53.75	30	32	NPT
25	16	736 914 007	0.032	1.9	IR	57.40	30	38	NPT
32	16	736 914 008	0.055	1.9	IR	62.20	30	48	NPT



**SYGEF Ultra Fixpoint Fitting
PN16**
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP



d (mm)	PN (bar)	Code	SP	Weight (kg)	Bn (mm)	Bm1 (mm)	FM	Lmax (mm)	s (mm)
20	16	736 918 006	1	0.066	32	23.0	IR	127	1.9
25	16	736 918 007	1	0.080	32	23.0	IR	127	1.9
32	16	736 918 008	1	0.100	32	23.0	IR	127	1.9
50	16	736 918 010	1	0.150	32	24.0	IR	127	2.4
63	16	736 918 011	1	0.197	32	27.0	IR	133	2.5
90	16	736 918 013	1	0.236	40	28.0	IR	135	2.5
110	16	736 918 014	1	0.388	40	30.5	IR	145	3.1
160	16	736 918 017	1	0.876	40	39.5	IR	169	4.5

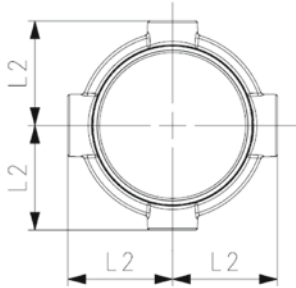


SYGEF Ultra Installation Fitting
PN16
High Purity clean-room product ISO Class 5

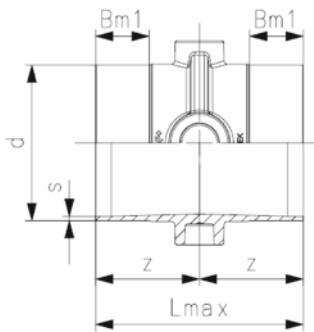
Model:

- Material: PEEK-HP
- Four tapping hole locations suitable for Rp or NPT threads

d	PN	Code	Weight
(mm)	(bar)		(kg)
63	16	736 918 811	0.132
90	16	736 918 813	0.204
110	16	736 918 814	0.287
160	16	736 918 817	0.582



d	Bm1	FM	L2	Lmax	s	z	Tapping Thread Size	Tapping Thread Size
(mm)	(mm)		(mm)	(mm)	(mm)	(mm)	(inch)	(inch)*
63	30	IR	46	110	2.5	55.0	½	
90	31	IR	59	120	2.5	60.0	½	¾
110	34	IR	70	125	3.1	62.5	½	¾
160	43	IR	95	143	4.5	71.5	½	¾

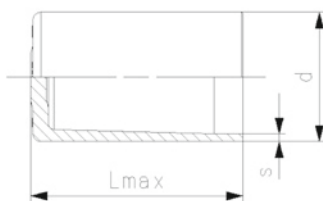


SYGEF Ultra End Cap
PN16
High Purity clean-room product ISO Class 5

Model:

- Material: PEEK-HP

d	PN	Code	s	FM	Lmax
(mm)	(bar)		(mm)		(mm)
20	16	736 968 006	1.9	IR	52.4
25	16	736 968 007	1.9	IR	52.4
32	16	736 968 008	1.9	IR	52.4



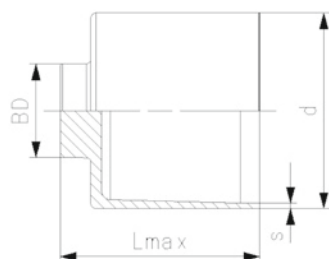


**SYGEF Ultra Tapping Cap
PN16**
High Purity clean-room product ISO Class 5

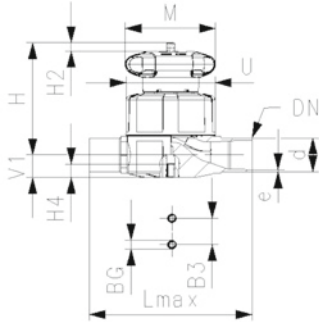
Model:

- Material: PEEK-HP

d (mm)	PN (bar)	Code	Weight (kg)	s (mm)	FM	Lmax (mm)	BD (mm)
50	16	736 968 510	0.055	2.4	IR	72.6	28
63	16	736 968 511	0.096	2.5	IR	81.5	43
90	16	736 968 513	0.154	2.5	IR	91.5	43
110	16	736 968 514	0.226	3.1	IR	95.9	43
160	16	736 968 517	0.531	4.5	IR	105.5	43



SYGEF Ultra Valves



SYGEF Ultra Diaphragm valve type 515 With butt fusion spigots metric

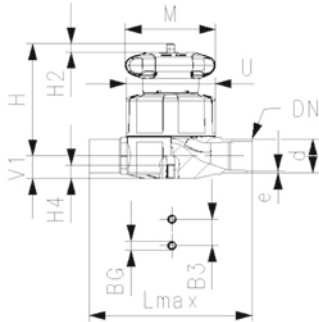
Model:

- Material: PEEK-HP
- Handwheel with built-in locking mechanism

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

d	DN	PN	PTFE/EPDM Code	BG	B3	e	H	H2	H4	Lmax	M	U	V1
(mm)	(mm)	(bar)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	15	10	477 515 132	7.9	25	2.10	72.80	4.1	13	124	64.8	63.5	14.0
25	20	10	477 515 133	7.9	25	2.10	80.40	7.1	13	144	64.8	78.6	17.5
32	25	10	477 515 134	7.9	25	2.10	107.00	8.3	13	155	87.0	85.2	21.5
50	40	10	477 515 136	9.6	45	2.55	148.00	12.8	13	193	135.0	113.0	32.0
63	50	10	477 515 137	9.6	45	2.65	166.00	18.8	13	224	135.0	141.0	39.0



SYGEF Ultra Diaphragm valve type 515 With butt fusion spigots metric

Model:

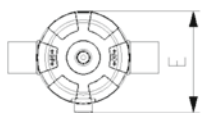
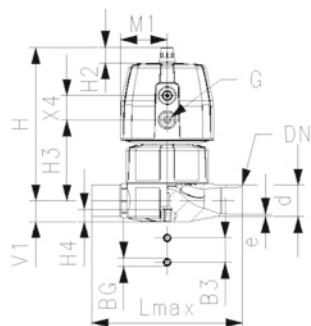
- Material: PEEK-HP
- Handwheel with built-in locking mechanism
- **For water use only**

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

d	DN	PN	PTFE/EPDM Code	Weight
(mm)	(mm)	(bar)		(kg)
20	15	16	476 515 132	
25	20	16	476 515 133	0.438
32	25	16	476 515 134	0.870
50	40	16	476 515 136	
63	50	16	476 515 137	

d	BG	B3	e	H	H2	H4	Lmax	M	U	V1
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	7.9	25	2.10	72.80	4.1	13	124	64.8	63.5	14.0
25	7.9	25	2.10	80.40	7.1	13	144	64.8	78.6	17.5
32	7.9	25	2.10	107.00	8.3	13	155	87.0	85.2	21.5
50	9.6	45	2.55	148.00	12.8	13	193	135.0	113.3	32.0
63	9.6	45	2.65	166.00	18.8	13	224	135.0	140.8	39.0



**SYGEF Ultra Diaphragm valve DIASTAR Ten
FC (Fail safe to close)
With butt fusion spigots metric**

Model:

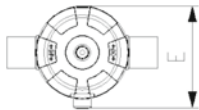
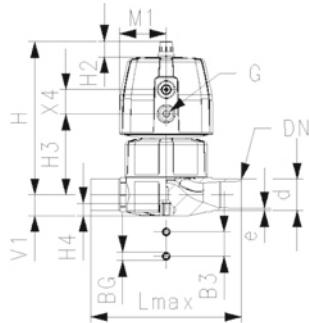
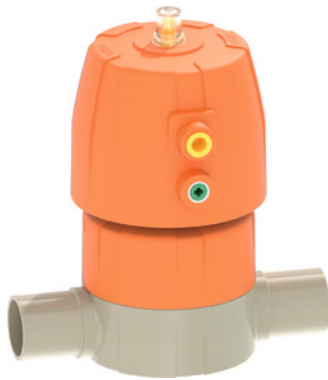
- Material: PEEK-HP
- Rotating air connection at 90° intervals

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: one side

d	DN	PN	PTFE/EPDM	Code
(mm)	(mm)	(bar)		
20	15	10		477 625 132
25	20	10		477 625 133
32	25	10		477 625 134
50	40	10		477 625 136
63	50	10		477 625 137

d	BG	B3	E	e	G	H	H2	H3	H4	Lmax	M1	V1	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	7.9	25	78.10	2.10	G1/8"	117.05	16.00	60.10	13	124	34.05	14.0	24
25	7.9	25	106.00	2.10	G1/8"	147.75	16.00	73.05	13	144	48.00	17.5	25
32	7.9	25	106.00	2.10	G1/8"	158.60	14.40	85.55	13	155	48.00	21.5	25
50	9.6	45	166.00	2.55	G1/4"	240.55	26.50	119.30	13	193	75.00	32.0	36
63	9.6	45	166.00	2.65	G1/4"	252.70	26.50	131.45	13	224	75.00	39.0	36



SYGEF Ultra Diaphragm valve DIASTAR Ten
FO (Fail safe to open)
With butt fusion spigots metric

Model:

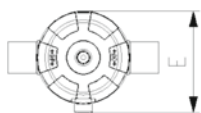
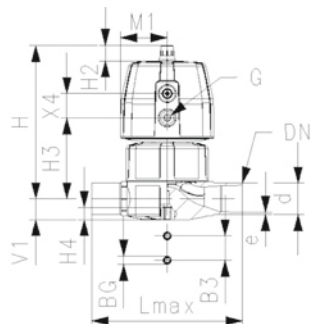
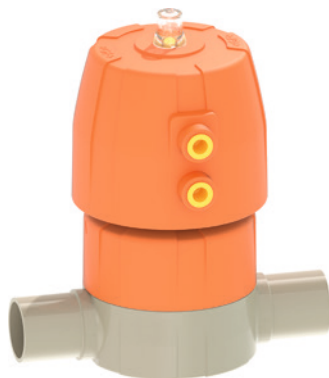
- Material: PEEK-HP
- Rotating air connection at 90° intervals

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: one side

d	DN	PN	PTFE/EPDM
(mm)	(mm)	(bar)	Code
20	15	10	477 645 132
25	20	10	477 645 133
32	25	10	477 645 134
50	40	10	477 645 136
63	50	10	477 645 137

d	BG	B3	E	e	G	H	H2	H3	H4	Lmax	M1	V1	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	7.9	25	78	2.10	G1/8"	117.05	16.00	60.10	13	124	34.05	14.0	24
25	7.9	25	106	2.10	G1/8"	147.75	16.00	73.05	13	144	48.00	17.5	25
32	7.9	25	106	2.10	G1/8"	158.60	14.40	85.55	13	155	48.00	21.5	25
50	9.6	45	166	2.55	G1/4"	240.55	26.50	119.30	13	193	75.00	32.0	36
63	9.6	45	166	2.65	G1/4"	252.70	26.50	131.45	13	224	75.00	39.0	36



SYGEF Ultra Diaphragm valve DIASTAR Ten DA (Double acting) With butt fusion spigots metric

Model:

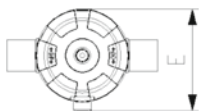
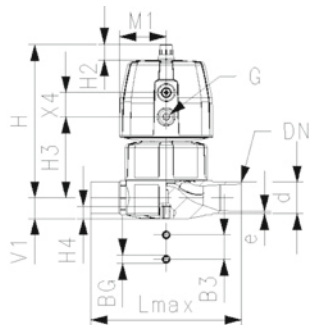
- Material: PEEK-HP
- Rotating air connection at 90° intervals

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: one side

d	DN	PN	PTFE/EPDM	Code
(mm)	(mm)	(bar)		
20	15	10	477 655 132	
25	20	10	477 655 133	
32	25	10	477 655 134	
50	40	10	477 655 136	
63	50	10	477 655 137	

d	BG	B3	E	e	G	H	H2	H3	H4	Lmax	M1	V1	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	7.9	25	78	2.10	G1/8"	117.00	16.00	60.10	13	124	34.05	14.0	24
25	7.9	25	106	2.10	G1/8"	147.70	16.00	73.05	13	144	48.00	17.5	25
32	7.9	25	106	2.10	G1/8"	158.50	14.40	85.55	13	155	48.00	21.5	25
50	9.6	45	166	2.55	G1/4"	240.60	26.50	119.30	13	193	75.00	32.0	36
63	9.6	45	166	2.65	G1/4"	252.75	26.50	131.45	13	224	75.00	39.0	36



**SYGEF Ultra Diaphragm valve DIASTAR TenPlus
FC (Fail safe to close)
With butt fusion spigots metric**

Model:

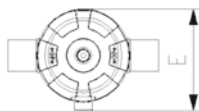
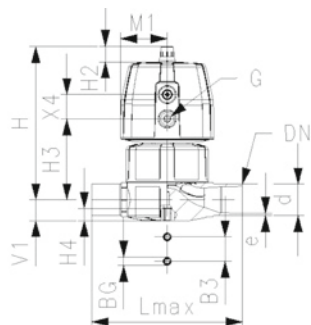
- Material: PEEK-HP
- Rotating air connection at 90° intervals

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: **both sides**

d	DN	PN	PTFE/EPDM
(mm)	(mm)	(bar)	Code
20	15	10	477 685 132
25	20	10	477 685 133
32	25	10	477 685 134
50	40	10	477 685 136
63	50	10	477 685 137

d	BG	B3	E	e	G	H	H2	H3	H4	Lmax	M1	V1	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	7.9	25	106	2.10	G1/8"	143.15	16.00	68.45	13	124	48	14.0	25
25	7.9	25	106	2.10	G1/8"	147.75	16.00	73.05	13	144	48	17.5	25
32	7.9	25	130	2.10	G1/8"	192.70	14.40	92.60	13	155	60	21.5	26
50	9.6	45	193	2.55	G1/4"	265.75	26.50	124.40	13	193	90	32.0	37
63	9.6	45	196	2.65	G1/4"	277.90	26.50	136.55	13	224	90	39.0	37



**SYGEF Ultra Diaphragm valve DIASTAR Sixteen
FC (Fail safe to close)
With butt fusion spigots metric**

Model:

- Material: PEEK-HP
- Rotating air connection at 90° intervals
- **For water use only**

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: one side

d	DN	PN	PTFE/EPDM
(mm)	(mm)	(bar)	Code
20	15	16	476 635 132
25	20	16	476 635 133
32	25	16	476 635 134
50	40	16	476 635 136
63	50	16	476 635 137

d	BG	B3	E	e	G	H	H2	H3	H4	Lmax	M1	V1	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	7.9	25	106	2.10	G1/8"	143.15	16.00	68.45	13	124	48	14.0	25
25	7.9	25	106	2.10	G1/8"	128.15	16.00	53.45	13	144	48	17.5	25
32	7.9	25	130	2.10	G1/8"	192.70	26.50	92.60	13	155	60	21.5	26
50	9.6	45	196	2.55	G1/4"	265.70	26.40	124.40	13	193	90	32.0	37
63	9.6	45	196	2.65	G1/4"	277.90	26.50	136.55	13	224	90	39.0	37



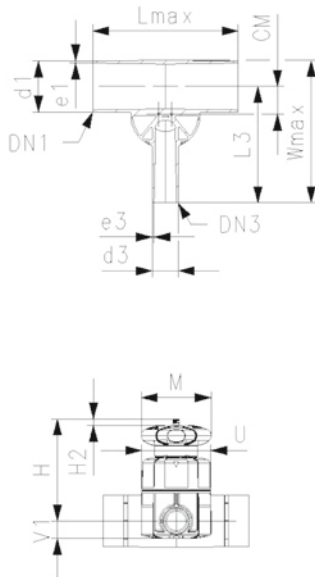
SYGEF Ultra Diaphragm valve type 519 With butt fusion spigots metric

Model:

- Material: PEEK-HP
- Handwheel with built-in locking mechanism

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches



d1	d3	DN1	DN3	PN	PTFE/EPDM
(mm)	(mm)	(mm)	(mm)	(bar)	Code
20	20	15	15	10	477 519 301
25	20	20	15	10	477 519 303
25	25	20	20	10	477 519 304
32	20	25	15	10	477 519 307
32	25	25	20	10	477 519 308
32	32	25	25	10	477 519 309
50	20	40	15	10	477 519 318
50	25	40	20	10	477 519 319
50	32	40	25	10	477 519 320
50	50	40	40	10	477 519 322
63	20	50	15	10	477 519 325
63	25	50	20	10	477 519 326
63	32	50	25	10	477 519 327
63	50	50	40	10	477 519 329
63	63	50	50	10	477 519 330
90	20	80	15	10	477 519 341
90	25	80	20	10	477 519 342
90	32	80	25	10	477 519 343
90	50	80	40	10	477 519 345
90	63	80	50	10	477 519 346
110	20	100	15	10	477 519 351
110	25	100	20	10	477 519 352
110	32	100	25	10	477 519 353
110	50	100	40	10	477 519 355
110	63	100	50	10	477 519 356

d1	CM	e1	e3	H	H2	Lmax	L3	M	U	V1	Wmax
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	11.30	2.10	2.10	75.30	4.1	162	96.00	64.8	63.5	14.0	117.0
25	15.30	2.10	2.10	60.30	7.1	162	108.00	64.8	78.2	17.5	132.5
25	15.30	2.10	2.10	60.30	7.1	162	108.00	64.8	78.2	17.5	132.5
32	18.30	2.10	2.10	63.30	7.1	162	120.00	64.8	78.2	21.5	141.5
32	18.30	2.10	2.10	63.30	7.1	162	120.00	64.8	78.2	21.5	141.5
32	18.30	2.10	2.10	107.00	8.3	160	120.00	87.0	85.2	21.5	144.9
50	26.50	2.55	2.10	77.40	7.1	180	134.00	64.8	78.2	25.9	159.9
50	27.50	2.55	2.10	120.00	8.3	180	134.00	87.0	85.2	25.9	159.9
50	27.50	2.55	2.10	120.00	8.3	180	134.00	87.0	85.2	25.9	159.9
50	32.30	2.55	2.55	164.00	18.8	209	169.00	135.0	140.8	32.0	208.4
63	33.00	2.65	2.10	83.90	7.1	180	144.00	64.8	78.2	32.4	176.4
63	34.30	2.65	2.10	126.60	8.3	180	144.00	87.0	85.2	32.4	176.4
63	34.30	2.65	2.10	126.60	8.3	180	144.00	87.0	85.2	32.4	176.4
63	38.80	2.65	2.55	170.45	18.8	220	192.00	135.0	140.8	39.0	224.9
63	38.80	2.65	2.65	170.45	18.8	220	192.00	135.0	140.8	39.0	225.0
90	46.50	2.65	2.10	140.40	8.3	190	159.00	87.0	85.2	45.9	204.9
90	46.50	2.65	2.10	140.40	8.3	190	159.00	87.0	85.2	45.9	204.9
90	46.50	2.65	2.10	140.40	8.3	190	159.00	87.0	85.2	45.9	204.9
90	50.70	2.65	2.55	184.45	18.8	250	207.00	135.0	140.8	46.2	253.2
90	50.70	2.65	2.65	184.45	18.8	250	207.00	135.0	140.8	46.2	253.2
110	55.90	3.25	2.10	149.20	8.3	190	171.00	87.0	85.2	56.0	227.0

d1	CM	e1	e3	H	H2	Lmax	L3	M	U	V1	Wmax
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
110	55.90	3.25	2.10	149.20	8.3	190	171.00	87.0	85.2	56.0	227.0
110	55.90	3.25	2.10	149.20	8.3	190	171.00	87.0	85.2	56.0	227.0
110	59.70	3.25	2.55	194.20	18.8	250	219.00	135.0	140.8	56.2	275.2
110	59.70	3.25	2.65	194.25	18.8	250	219.00	135.0	140.8	56.2	275.2



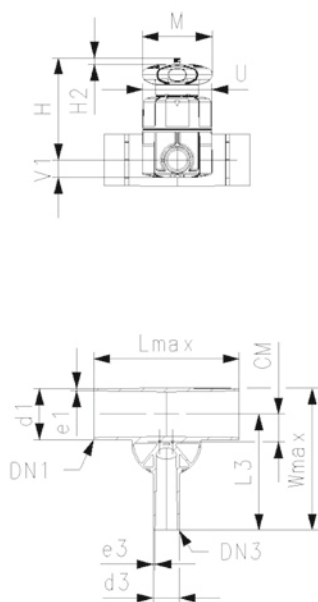
SYGEF Ultra Diaphragm valve type 519 With butt fusion spigots metric

Model:

- Material: PEEK-HP
- Handwheel with built-in locking mechanism
- **For water use only**

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches



d1	d3	DN1	DN3	PN	PTFE/EPDM	Weight
(mm)	(mm)	(mm)	(mm)	(bar)	Code	(kg)
20	20	15	15	16	476 519 301	
25	20	20	15	16	476 519 303	
25	25	20	20	16	476 519 304	
32	20	25	15	16	476 519 307	
32	25	25	20	16	476 519 308	
32	32	25	25	16	476 519 309	
50	20	40	15	16	476 519 318	0.963
50	25	40	20	16	476 519 319	0.812
50	32	40	25	16	476 519 320	0.845
50	50	40	40	16	476 519 322	
63	20	50	15	16	476 519 325	0.905
63	25	50	20	16	476 519 326	0.926
63	32	50	25	16	476 519 327	2.381
63	50	50	40	16	476 519 329	
63	63	50	50	16	476 519 330	
90	20	80	15	16	476 519 341	
90	25	80	20	16	476 519 342	
90	32	80	25	16	476 519 343	
90	50	80	40	16	476 519 345	
90	63	80	50	16	476 519 346	
110	20	100	15	16	476 519 351	
110	25	100	20	16	476 519 352	
110	32	100	25	16	476 519 353	
110	50	100	40	16	476 519 355	
110	63	100	50	16	476 519 356	

CM	e1	e3	H	H2	Lmax	L3	M	U	V1	Wmax
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
11.30	2.10	2.10	145.65	16.00	162	96	48	63.50	14.0	117.0
15.30	2.10	2.10	127.65	16.00	162	108	48	78.20	17.5	132.5
15.30	2.10	2.10	127.65	16.00	162	108	48	78.20	17.5	132.5
18.30	2.10	2.10	130.65	16.00	162	120	48	78.20	21.5	141.5
18.30	2.10	2.10	130.65	16.00	162	120	48	78.20	21.5	141.5
18.30	2.10	2.10	193.10	26.50	160	120	60	85.20	21.5	144.9
26.50	2.55	2.10	144.75	16.00	180	134	48	78.20	25.9	159.9
27.50	2.55	2.10	206.10	26.50	180	134	60	85.20	25.9	159.9
27.50	2.55	2.10	206.10	26.50	180	134	60	85.20	25.9	159.9
32.30	2.55	2.55	275.45	26.45	209	169	90	140.80	32.0	208.4
33.00	2.65	2.10	151.25	16.00	180	144	48	78.20	32.4	176.4
34.30	2.65	2.10	212.70	26.50	180	144	60	85.20	32.4	176.4
34.30	2.65	2.10	212.70	26.50	180	144	60	85.20	32.4	176.4
38.80	2.65	2.55	281.90	26.45	220	192	90	140.80	39.0	224.9
38.80	2.65	2.65	281.90	26.45	220	192	90	140.80	39.0	225.0

CM	e1	e3	H	H2	Lmax	L3	M	U	V1	Wmax
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
46.50	2.65	2.10	226.50	26.50	190	159	60	85.20	45.9	204.9
46.50	2.65	2.10	226.50	26.50	190	159	60	85.20	45.9	204.9
46.50	2.65	2.10	226.50	26.50	190	159	60	85.20	45.9	204.9
50.70	2.65	2.55	295.90	26.45	250	207	90	140.80	46.2	253.2
50.70	2.65	2.65	295.90	26.45	250	207	90	140.80	46.2	253.2
55.90	3.25	2.10	235.30	26.50	190	171	60	85.20	56.0	227.0
55.90	3.25	2.10	235.30	26.50	190	171	60	85.20	56.0	227.0
55.90	3.25	2.10	235.30	26.50	190	171	60	85.20	56.0	227.0
59.70	3.25	2.55	305.65	26.45	250	219	90	140.80	56.2	275.2
59.70	3.25	2.65	305.70	26.45	250	219	90	140.80	56.2	275.2



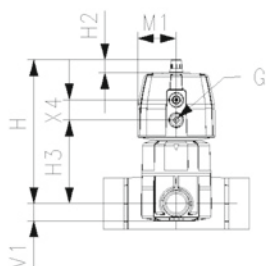
SYGEF Ultra Diaphragm valve DIASTAR Ten FC (Fail safe to close)
With butt fusion spigots metric

Model:

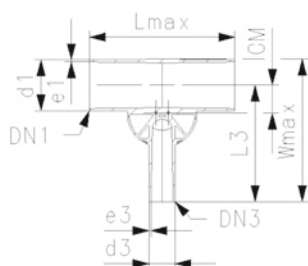
- Material: PEEK-HP
- Rotating air connection at 90° intervals

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: one side



d1	d3	DN1	DN3	PN	PTFE/EPDM
(mm)	(mm)	(mm)	(mm)	(bar)	Code
20	20	15	15	10	477 629 301
25	20	20	15	10	477 629 303
25	25	20	20	10	477 629 304
32	20	25	15	10	477 629 307
32	25	25	20	10	477 629 308
32	32	25	25	10	477 629 309
50	20	40	15	10	477 629 318
50	25	40	20	10	477 629 319
50	32	40	25	10	477 629 320
63	20	50	15	10	477 629 325
63	25	40	20	10	477 629 326
63	32	50	25	10	477 629 327



CM	e1	e3	G	H	H2	H3	Lmax	L3	M1	V1	Wmax	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
11.3	2.10	2.1	G1/8"	120	60.7	62.60	162	96	34.05	14.0	117.0	24
15.3	2.10	2.1	G1/8"	155	70.1	80.35	162	108	48.00	17.5	132.5	25
15.3	2.10	2.1	G1/8"	155	70.1	80.35	162	108	48.00	17.5	132.5	25
18.3	2.10	2.1	G1/8"	158	73.1	83.35	162	120	48.00	21.5	141.5	25
18.3	2.10	2.1	G1/8"	158	73.1	83.35	162	120	48.00	21.5	141.5	25
18.3	2.10	2.1	G1/8"	170	84.7	84.45	160	120	48.00	21.5	144.9	25
26.5	2.55	2.1	G1/8"	172	87.2	97.45	180	134	48.00	25.9	159.9	25
27.5	2.55	2.1	G1/8"	183	97.7	97.45	180	134	48.00	25.9	159.9	25
27.5	2.55	2.1	G1/8"	183	97.7	97.45	180	134	48.00	25.9	159.9	25
33.0	2.65	2.1	G1/8"	179	93.7	103.95	180	144	48.00	32.4	176.4	25
34.3	2.65	2.1	G1/8"	189	104.0	104.05	180	144	48.00	32.4	176.4	25
34.3	2.65	2.1	G1/8"	189	104.0	104.05	180	144	48.00	32.4	176.4	25



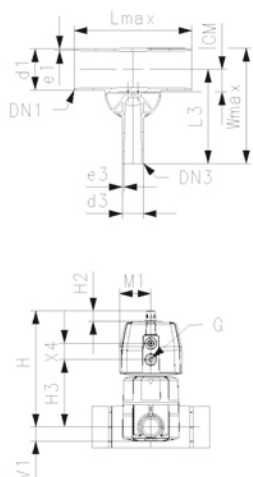
**SYGEF Ultra Diaphragm valve DIASTAR TenPlus
FC (Fail safe to close)
With butt fusion spigots metric**

Model:

- Material: PEEK-HP
- Rotating air connection at 90° intervals

Option:

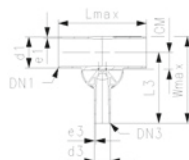
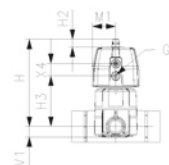
- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: both sides



d1 (mm)	d3 (mm)	DN1 (mm)	DN3 (mm)	PN (bar)	PTFE/EPDM Code
20	20	15	15	10	477 689 301
25	20	20	15	10	477 689 303
25	25	20	20	10	477 689 304
32	20	25	15	10	477 689 307
32	25	25	20	10	477 689 308
32	32	25	25	10	477 689 309
50	20	40	15	10	477 689 318
50	25	40	20	10	477 689 319
50	32	40	25	10	477 689 320
50	50	40	40	10	477 689 322
63	20	50	15	10	477 689 325
63	25	50	20	10	477 689 326
63	32	50	25	10	477 689 327
63	50	50	40	10	477 689 329
63	63	50	50	10	477 689 330
90	20	80	15	10	477 689 341
90	25	80	20	10	477 689 342
90	32	80	25	10	477 689 343
90	50	80	40	10	477 689 345
90	63	80	50	10	477 689 346
110	20	100	15	10	477 689 351
110	25	100	20	10	477 689 352
110	32	100	25	10	477 689 353
110	50	100	40	10	477 689 355
110	63	100	50	10	477 689 356

CM (mm)	e1 (mm)	e3 (mm)	G (mm)	H (mm)	H2 (mm)	H3 (mm)	Lmax (mm)	L3 (mm)	M1 (mm)	V1 (mm)	Wmax (mm)	X4 (mm)
11.30	2.10	2.10	G1/8"	146	16.0	70.95	162	96	48	14.0	117.0	25
15.30	2.10	2.10	G1/8"	147	16.0	72.55	162	108	48	17.5	132.5	25
15.30	2.10	2.10	G1/8"	147	16.0	72.55	162	108	48	17.5	132.5	25
18.30	2.10	2.10	G1/8"	150	16.0	75.55	162	120	48	21.5	141.5	25
18.30	2.10	2.10	G1/8"	150	16.0	75.55	162	120	48	21.5	141.5	25
18.30	2.10	2.10	G1/8"	193	26.5	93.00	160	120	60	21.5	144.9	26
26.50	2.55	2.10	G1/8"	164	16.0	89.65	180	134	48	25.9	159.9	25
27.50	2.55	2.10	G1/8"	206	26.5	106.00	180	134	60	25.9	159.9	26
27.50	2.55	2.10	G1/8"	206	26.5	106.00	180	134	60	25.9	159.9	26
32.30	2.55	2.55	G1/4"	275	26.5	134.10	209	169	90	32.0	208.4	37
33.00	2.65	2.10	G1/8"	171	16.0	96.15	180	144	48	32.4	176.4	25
34.30	2.65	2.10	G1/8"	213	26.5	112.60	180	144	60	32.4	176.4	26
34.30	2.65	2.10	G1/8"	213	26.5	112.60	180	144	60	32.4	176.4	26
38.80	2.65	2.55	G1/4"	282	26.5	140.55	220	192	90	39.0	224.9	37
38.80	2.65	2.65	G1/4"	282	26.5	140.55	220	192	90	39.0	225.0	37
46.50	2.65	2.10	G1/8"	227	26.5	126.40	190	159	60	45.9	204.9	26
46.50	2.65	2.10	G1/8"	227	26.5	126.40	190	159	60	45.9	204.9	26
46.50	2.65	2.10	G1/8"	227	26.5	126.40	190	159	60	45.9	204.9	26
50.70	2.65	2.55	G1/4"	296	26.5	154.55	250	207	90	46.2	253.2	37
50.70	2.65	2.65	G1/4"	296	26.5	154.55	250	207	90	46.2	253.2	37
55.90	3.25	2.10	G1/8"	235	26.5	135.20	190	171	60	56.0	227.0	26

CM	e1	e3	G	H	H2	H3	Lmax	L3	M1	V1	Wmax	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
55.90	3.25	2.10	G1/8"	235	26.5	135.20	190	171	60	56.0	227.0	26
55.90	3.25	2.10	G1/8"	235	26.5	135.20	190	171	60	56.0	227.0	26
59.70	3.25	2.55	G1/4"	306	26.5	164.30	250	219	90	56.2	275.2	37
59.70	3.25	2.65	G1/4"	306	26.5	164.35	250	219	90	56.2	275.2	37



**SYGEF Ultra Diaphragm valve DIASTAR Sixteen
FC (Fail safe to close)
With butt fusion spigots metric**

Model:

- Material: PEEK-HP
- Rotating air connection at 90° intervals
- **For water use only**

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available
- Working Pressure: one side

d1	d3	DN1	DN3	PN	PTFE/EPDM	Code
(mm)	(mm)	(mm)	(mm)	(bar)		
20	20	15	15	10	476 639 301	
25	20	20	15	10	476 639 303	
25	25	20	20	10	476 639 304	
32	20	25	15	10	476 639 307	
32	25	25	20	10	476 639 308	
32	32	25	25	10	476 639 309	
50	20	40	15	10	476 639 318	
50	25	40	20	10	476 639 319	
50	32	40	25	10	476 639 320	
50	50	40	40	10	476 639 322	
63	20	50	15	10	476 639 325	
63	25	50	20	10	476 639 326	
63	32	50	25	10	476 639 327	
63	50	50	40	10	476 639 329	
63	63	50	50	10	476 639 330	
90	20	80	15	10	476 639 341	
90	25	80	20	10	476 639 342	
90	32	80	25	10	476 639 343	
90	50	80	40	10	476 639 345	
90	63	80	50	10	476 639 346	
110	20	100	15	10	476 639 351	
110	25	100	20	10	476 639 352	
110	32	100	25	10	476 639 353	
110	50	100	40	10	476 639 355	
110	63	100	50	10	476 639 356	

CM	e1	e3	G	H	H2	H3	Lmax	L3	M1	V1	Wmax	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
11.30	2.10	2.10	G1/8"	146	16.0	70.95	162	96	48	14.0	117.0	25
15.30	2.10	2.10	G1/8"	147	16.0	72.55	162	108	48	17.5	132.5	25
15.30	2.10	2.10	G1/8"	147	16.0	72.55	162	108	48	17.5	132.5	25
18.30	2.10	2.10	G1/8"	150	16.0	75.55	162	120	48	21.5	141.5	25
18.30	2.10	2.10	G1/8"	150	16.0	75.55	162	120	48	21.5	141.5	25
18.30	2.10	2.10	G1/8"	193	26.5	93.00	160	120	60	21.5	144.9	26
26.50	2.55	2.10	G1/8"	164	16.0	89.65	180	134	48	25.9	159.9	25
27.50	2.55	2.10	G1/8"	206	26.5	106.00	180	134	60	25.9	159.9	26
27.50	2.55	2.10	G1/8"	206	26.5	106.00	180	134	60	25.9	159.9	26
32.30	2.55	2.55	G1/4"	275	26.5	134.10	209	169	90	32.0	208.4	37
33.00	2.65	2.10	G1/8"	171	16.0	96.15	180	144	48	32.4	176.4	25
34.30	2.65	2.10	G1/8"	213	26.5	112.60	180	144	60	32.4	176.4	26
34.30	2.65	2.10	G1/8"	213	26.5	112.60	180	144	60	32.4	176.4	26

CM	e1	e3	G	H	H2	H3	Lmax	L3	M1	V1	Wmax	X4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
38.80	2.65	2.55	G1/4"	282	26.5	140.55	220	192	90	39.0	224.9	37
38.80	2.65	2.65	G1/4"	282	26.5	140.55	220	192	90	39.0	225.0	37
46.50	2.65	2.10	G1/8"	227	26.5	126.40	190	159	60	45.9	204.9	26
46.50	2.65	2.10	G1/8"	227	26.5	126.40	190	159	60	45.9	204.9	26
46.50	2.65	2.10	G1/8"	227	26.5	126.40	190	159	60	45.9	204.9	26
50.70	2.65	2.55	G1/4"	296	26.5	154.55	250	207	90	46.2	253.2	37
50.70	2.65	2.65	G1/4"	296	26.5	154.55	250	207	90	46.2	253.2	37
55.90	3.25	2.10	G1/8"	235	26.5	135.20	190	171	60	56.0	227.0	26
55.90	3.25	2.10	G1/8"	235	26.5	135.20	190	171	60	56.0	227.0	26
55.90	3.25	2.10	G1/8"	235	26.5	135.20	190	171	60	56.0	227.0	26
59.70	3.25	2.55	G1/4"	306	26.5	164.30	250	219	90	56.2	275.2	37
59.70	3.25	2.65	G1/4"	306	26.5	164.35	250	219	90	56.2	275.2	37

Acessories

PPC Plastic pipe cutter

Model:

- For cutting of plastic pipes d6 - d160
- Suitable for all GF plastic types PE, PVC-U, PVC-C, ABS, PP, PVDF, ECTFE
- Removable deburring tool integrated

Note:

* Additional spare cutting wheel included in the handle



	d (mm)	Description	Code	Weight (kg)
*	6 - 63	Plastic Pipe cutter (s max. 7.00mm)	790 109 094	0.785
	50 - 125	Plastic Pipe cutter (s max. 16.00mm)	790 109 095	1.875
	110 - 160	Plastic Pipe cutter (s max. 16.00mm)	790 109 096	2.255
	6 - 63	Spare cutting wheel d6-63mm (3 Pcs./Pu.)	790 109 097	0.010
	50-125 / 110-160	Spare cutting wheel d50-125mm / d110-160mm (2 Pcs./Pu.)	790 109 098	0.030

Rotary Pipe Cutter d63-200 mm / d90-315 mm

- Tool for simple right-angle precision cutting of plastic pipe with a wall thickness PVDF/PVC up to 12 mm (up to 15mm with bigger cutter 790109851) and for PP/PE up to 20 mm (up to 30 mm with bigger cutter 790109851) --> blade for PP/PE must be ordered separately Code 790109861
- Including transport box
- The PPC-315 HP is the ideal tool for simple right angle precision cutting of PVDF, PVC, PP, PE and PB pipes, Size range d 160 to 315 mm with a wall thickness up to 10 mm (PVDF/PVC) and up to 30 mm (PP/PE/PB). Including transport box.
- Tool for simple right angle precision cutting of plastic pipe with a wall thickness up to 15 mm PVDF/PVC and up to 30 mm PP/PE --> blade for PP/PE must be ordered separately (Code 790109861)



d-d (mm)	Code	Weight (kg)
63 - 200	790 109 850	7.000
90 - 315	790 109 851	5.000



Re-rounding tool 3 Type hinged collar

- Re-rounding tools are used to re-round oval pipes during fusion as well as during the cooling time.

d (mm)	Code	SP	Weight (kg)	Description
90	799 199 133	1	1.690	Type hinged collar
110	799 199 134	1	1.537	Type hinged collar
160	799 199 137	1	2.318	Type hinged collar



Tangit KS Cleaner

- Special cleaner for plastic fusion connections in the material of PE, PP, PB, PVDF, ECTFE and PVC-U
- Suitable for Tangit Rapid. Must not be used for solvent cementing
- DVGW approved
- DW 5290 BR 0464

Size	Code	SP	Weight (kg)
1 liter	799 298 023	8	0.872



Cleaning tissue KO-TON-R

Minimum order quantity 100 pieces

- This cleaning tissue is suitable for the cleaning of the welding zone of piping components, because it is lint free and clean room checked.

Code	Weight (kg)
790 122 085	0.005

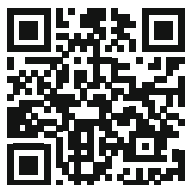
Notes

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Excellence in Flow

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www.gfps.com/our-locations



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