Technical Overview

Fyrtex 1

Fyrtex 1 is designed for high-pressure, abrasive, and high-temperature environments. The main wear parts are orifice discs and swirl chambers. These are easy to replace without tools. Fyrtex 1 is fully compatible with Delavan SDX®. All parts are made from durable tungsten carbide. Most types are available directly from stock.

Technical Specifications

Construction	Body, Adapter, Orifice Disc, Swirl Chamber, End Plate (or combined), Gasket, Seal, Screw Pin
Max. Operation Pressure	500 bar / 7250 PSI
Max. Temperature	540°C (metal seals) / 150°C (polymer seals)
Materials	Tungsten carbide (wear parts), Stainless Steel 316L (housing)
Compatibility	Fyrtex 3 components, Delavan SDX®
Configuration	Swirl Chamber + endplate (separate) or combined
Applications	Milk powder, whey protein, coffee extracts, pharmaceutical APIs, enzymes, chemicals and more

Swirl Chamber Chart: Without Endplate

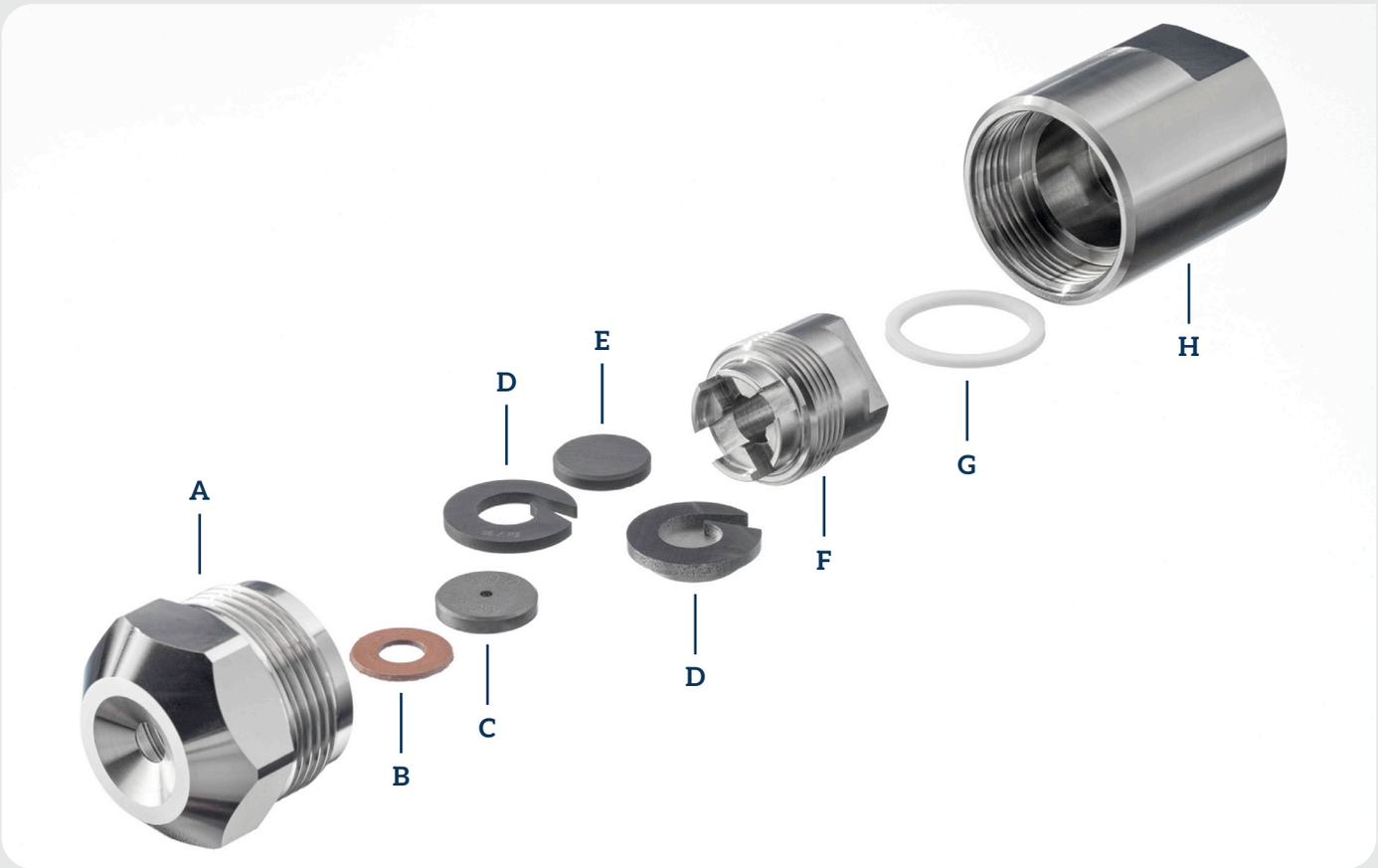
Part no.	Description
SB	Fyrtex Swirl Chamber SB / P2 without endplate
SC	Fyrtex Swirl Chamber SC / P3 without endplate
SD	Fyrtex Swirl Chamber SD / P4 without endplate
SE	Fyrtex Swirl Chamber SE / P5 without endplate
SF	Fyrtex Swirl Chamber SF / P6 without endplate
SG	Fyrtex Swirl Chamber SG / P7 without endplate
SH	Fyrtex Swirl Chamber SH / P8 without endplate

**All parts are made from durable tungsten carbide*

Swirl Chamber Chart: Combined

Part no.	Description
TCSA	Fyrtex Swirl Chamber combined TCSA / P1
TCSB	Fyrtex Swirl Chamber combined TCSB / P2
TCSC	Fyrtex Swirl Chamber combined TCSC / P3
TCSD	Fyrtex Swirl Chamber combined TCSD / P4
TCSE	Fyrtex Swirl Chamber combined TCSE / P5
TCSF	Fyrtex Swirl Chamber combined TCSF / P6
TCSG	Fyrtex Swirl Chamber combined TCSG / P7
TCSH	Fyrtex Swirl Chamber combined TCSH / P8
TCSI	Fyrtex Swirl Chamber combined TCSI / P9
TCSJ	Fyrtex Swirl Chamber combined TCSJ / P10
TCSK	Fyrtex Swirl Chamber combined TCSK / P11
TCSM	Fyrtex Swirl Chamber combined TCSM / P13

**All parts are made from durable tungsten carbide*



Fyrtex 1 Assembly Description and Part Numbers

Description	Part Number	Material
(A) Body (original)	A297760017	Stainless steel
(B) O-ring, orifice disc	G00018081	Gylon
(C) Fyrtex orifice disc	xxx*	Tungsten carbide
(D) Swirl chamber	See swirl chamber chart	Tungsten carbide
(E) Fyrtex round endplate	ENDRO	Tungsten carbide
(F) Screw pin (Original)	A297770016	Stainless steel
(G) O-Ring, Adapter	G00036291	Gylon
(H) 1/4 Adapter BSPT (Original)	A297750091	Stainless steel
(H) 3/8 Adapter BSPT (Original)	A297750117	Stainless steel
(H) 1/2 Adapter BSPT (Original)	A297750133	Stainless steel
(H) 3/4 Adapter BSPT (Original)	A297750158	Stainless steel

**All sizes available: contact our sales team*

Capacity chart nozzle series 1, 3, 5 & TD

Swirl Chamber	Orifice disc	Spray Angle at 69 BAR	Flow rate in Litres/Hour at BAR				
			75	100	150	200	300
SB SA	033 038	70° 80°	80	90	108	123	149
SC SB SA	034 040 048	60° 75° 85°	98	112	135	156	187
SD SC SA	035 039 059	60° 70° 85°	118	135	164	189	228
SE SD SB SA	035 039 054 069	50° 65° 80° 90°	136	159	193	225	271
SE SD SC SB	038 048 050 062	55° 65° 75° 85°	158	181	220	253	307
SF SE SC SB	038 041 054 069	50° 60° 75° 85°	178	205	248	285	347
SF SE SD SC SB	040 044 052 060 077	50° 60° 70° 80° 90°	199	229	279	321	390
SF SE SD SC	043 048 056 066	50° 60° 70° 80°	216	248	303	351	428
SG SF SE SC	040 045 051 071	45° 55° 65° 80°	237	275	332	384	474
SG SF SE SD SC	045 051 058 069 083	45° 55° 65° 75° 85°	277	321	390	451	559
SG SF SE SD SC	049 056 064 076 094	50° 60° 70° 80° 90°	315	364	439	512	627
SG SF SE SD SC	053 060 070 083 107	50° 60° 70° 80° 90°	356	409	505	585	711
SG SF SD	057 065 092	55° 65° 80°	394	454	559	646	795

* +/- 5% tolerance on flow

** Capacity chart based on water

Capacity chart nozzle series 1, 3, 5 & TD

Swirl Chamber	Orifice disc	Spray Angle at 69 BAR	Flow rate in Litres/Hour at BAR				
			75	100	150	200	300
SH SG SF SE SD	054 060 070 083 100	45° 55° 65° 75° 85°	436	501	615	715	895
SH SG SF SE SD	057 063 075 089 108	45° 55° 65° 75° 85°	474	550	669	776	955
SH SG SF SE SD	066 075 089 108 133	50° 60° 70° 80° 90°	593	681	833	968	1170
SH SG SF SE	075 086 102 125	50° 65° 75° 85°	715	826	1013	1174	1449
SI SH SG SF SE	076 083 097 114 141	45° 55° 65° 75° 85°	829	955	1182	1365	1690
SI SH SG SF	083 090 106 127	50° 60° 70° 80°	946	1097	1338	1544	1912
SI SH SG SF	088 099 119 141	50° 60° 70° 80°	1087	1238	1518	1771	2180
SJ SI SH SG SF	085 095 106 128 155	45° 55° 65° 75° 85°	1185	1369	1683	1950	2409
SJ SI SH SG	094 106 120 144	45° 55° 65° 75°	1384	1606	1968	2275	2875
SJ SI SH	103 115 133	50° 60° 70°	1579	1827	2236	2581	3193
SJ SI SH	110 128 145	50° 60° 70°	1790	2064	2523	2925	3613
SJ SI SH	118 135 156	55° 65° 75°	1988	2294	2810	3250	4015
SJ SI	127 149	55° 65°	2176	2514	3058	3555	4392

* +/- 5% tolerance on flow

** Capacity chart based on water

Capacity chart nozzle series 1, 3, 5 & TD

Swirl Chamber	Orifice disc	Spray Angle at 69 BAR	Flow rate in Litres/Hour at BAR				
			75	100	150	200	300
SJ SI	127 149	55° 65°	2176	2514	3058	3555	4392
SJ SI	135 155	60° 70°	2370	2745	3326	3861	4760
SJ	151	60°	2561	2963	3594	4167	5085

* +/- 5% tolerance on flow

** Capacity chart based on water