

Georg Fischer Type 546 Ball Valve

Standard Features

- **Size**
3/8" - 4"
- **Material**
PVC, CPVC, PROGEF® Standard Polypropylene, SYGEF® PVDF
- **Available**
Socket
Threaded
Flanged
Spigot (PVDF and PP only)
- **Seat**
PTFE
- **Seals**
EPDM or FPM
- **Mounting**
Stainless steel threaded inserts for easy and secure mounting

Optional Features

- **Actuation**
Electric actuation
Pneumatic actuation
- **Limit Switches**
Available for both manual and actuated versions
- **Handles**
Lockable handle
Handle extension
- **Control Ball**
For throttling applications available up to 2"



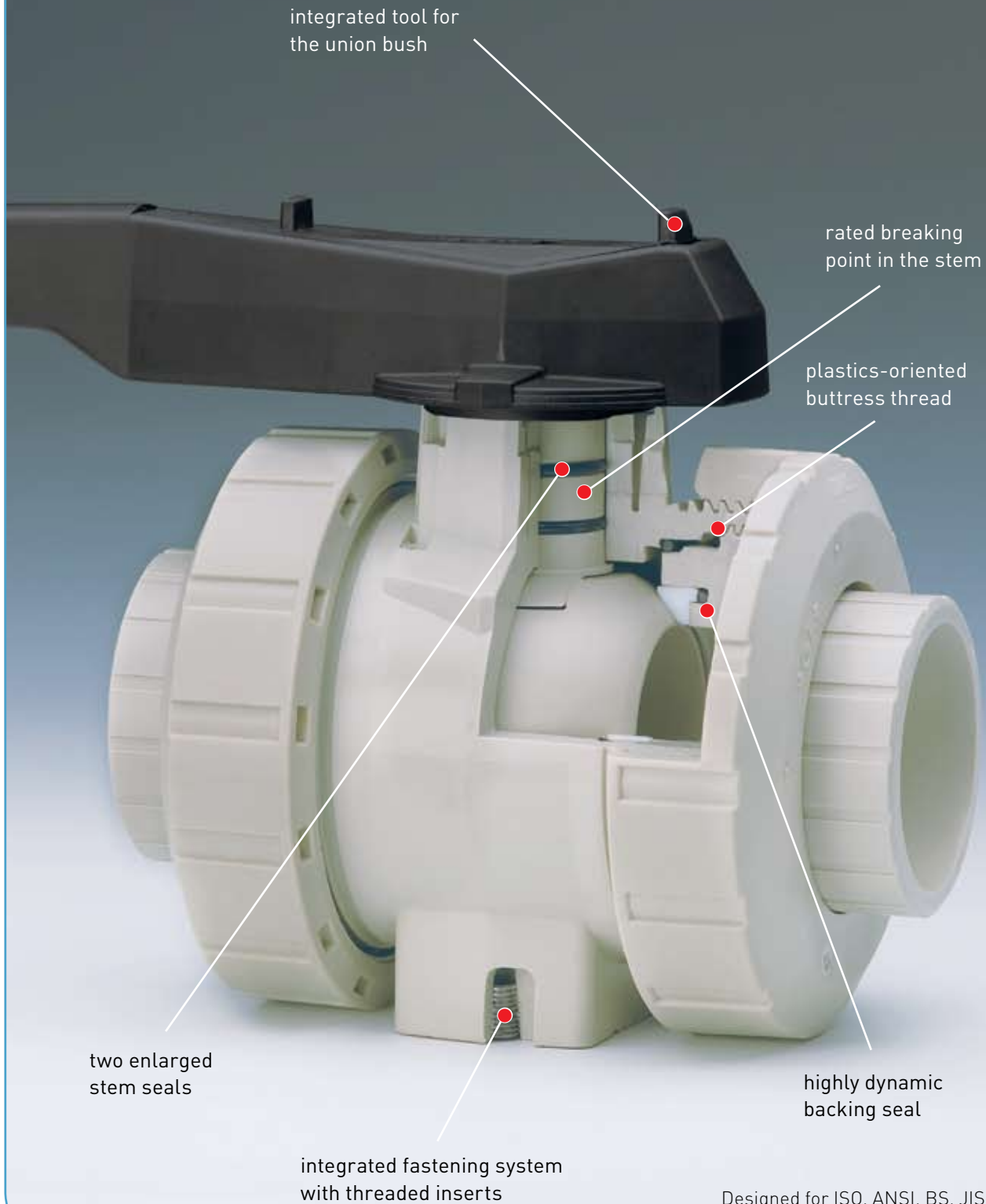
Standards

- **NSF61**
Pending 2½", 3", 4"
- **ISO9393**

General

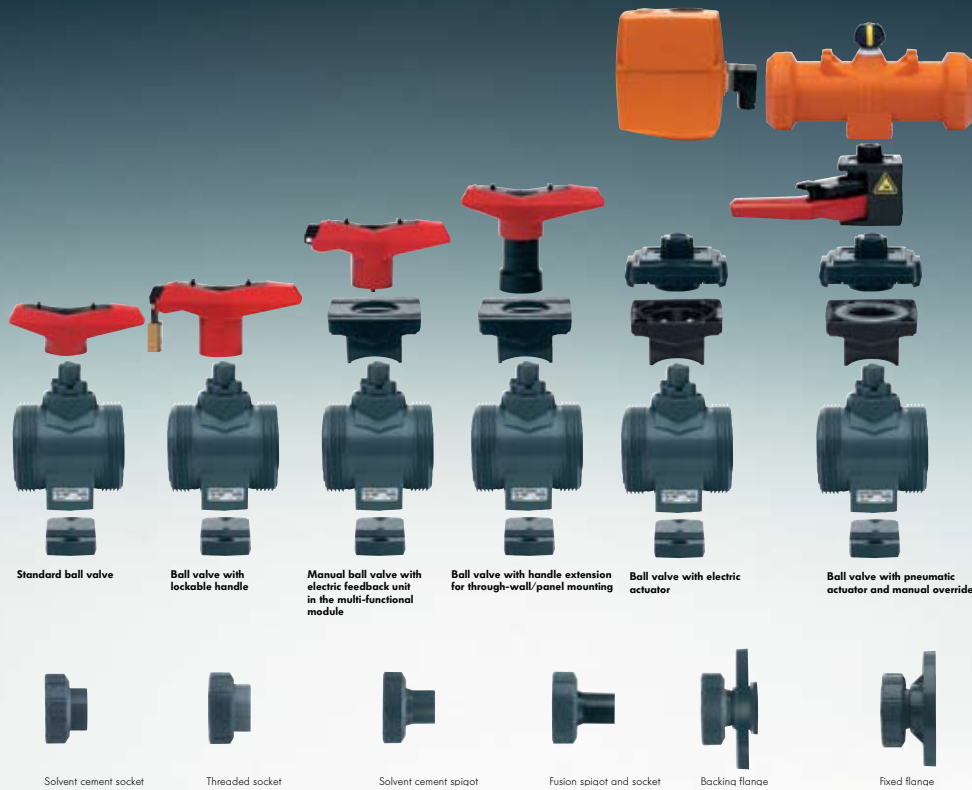
With its modular design, the type 546 ball valve is ideal for virtually any application. The valve is available in PVC, CPVC, Polypropylene, and PVDF materials. The different materials allow for a variety of chemical applications, and in many cases are an ideal fit for extreme temperatures. Easy installation is achieved with options such as threaded, flanged, or socket end connectors. The type 546 ball valve is also available in pneumatic and electrically actuated versions. Modularity allows for changes in the field such as retrofitting and actuator to a manual valve. The 546 was designed to meet the high demand world of industrial valves.

● Safety in every detail



Designed for ISO, ANSI, BS, JIS

Ideal for Virtually any application

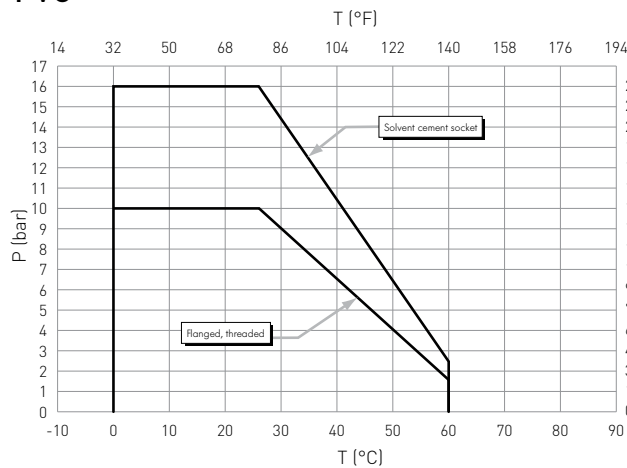


Technical Data

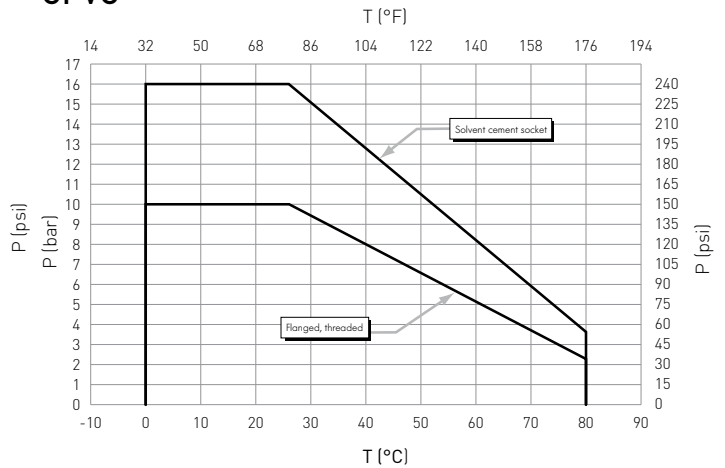
Pressure-Temperature Diagrams Technical data for Type 546 Ball Valve 3/8"-4"

The following pressure temperature diagrams are based on a lifetime of 25 years and the medium water or similar media

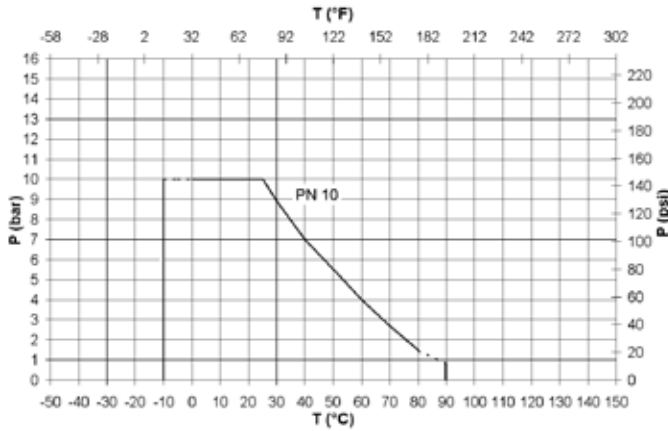
PVC



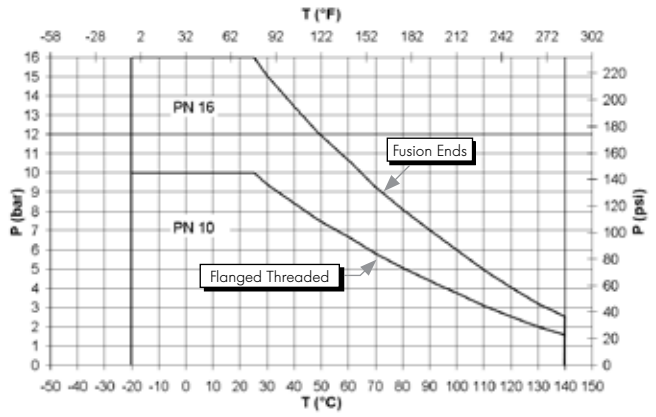
CPVC



PP

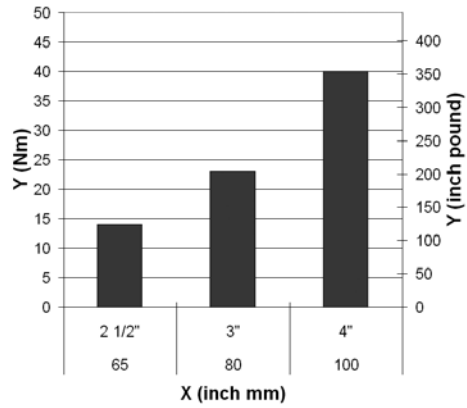
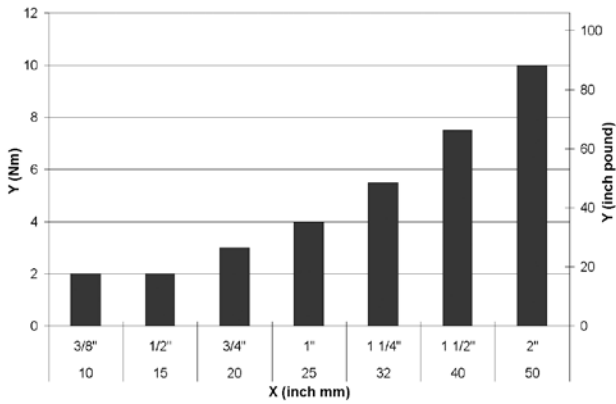


PVDF



Operating Torque

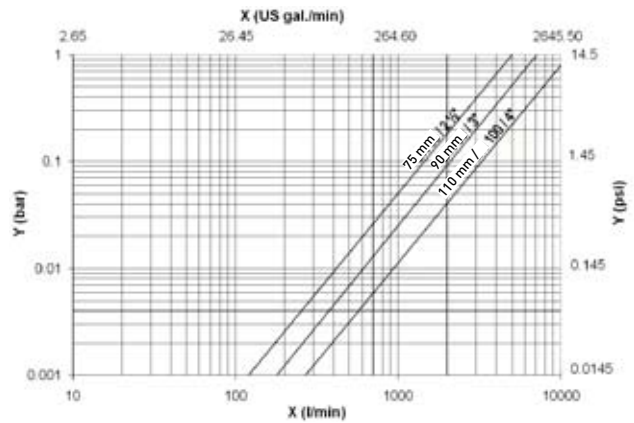
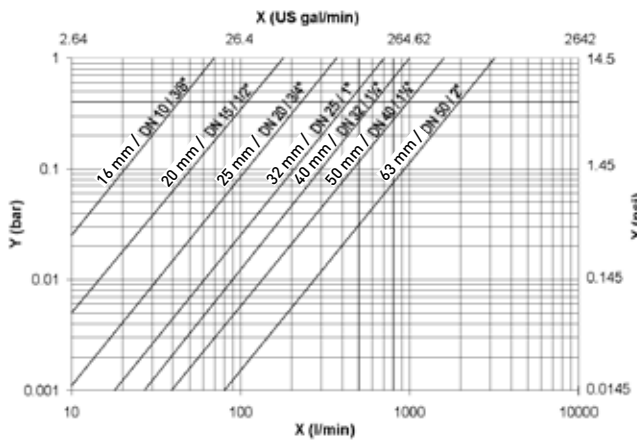
Average values at nominal pressure



X Size (mm, inch)

Y Torque (Nm, inch pound)

Pressure loss



Medium: water, 20°C

X Flow rate (l/min / U.S. gal/min)

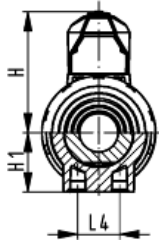
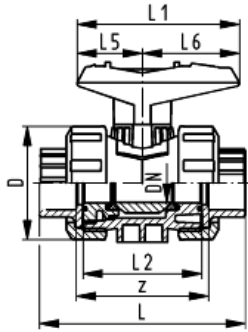
Y Pressure loss Δp (bar / psi)

PVC/CPVC

With mounting inserts

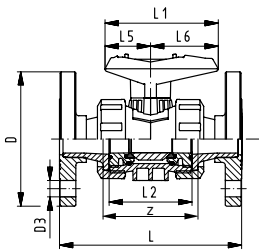
With solvent cement sockets inch ASTM

Inclusive 2 threaded valve ends NPT

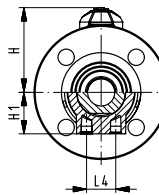


Inch	psi		Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]		L1 [mm]	L2 [mm]
	Socket	NPT						Socket	NPT		
3/8	232	150	4.9	50	57	27	12	105	98	77	56
1/2	232	150	12.9	50	57	27	12	105	98	77	56
3/4	232	150	24.5	58	67	30	12	121	111	97	65
1	232	150	49.0	68	73	36	12	133	127	97	71
1 1/4	232	150	70.0	84	90	44	15	154	147	128	85
1 1/2	232	150	112.0	97	97	51	15	164	157	128	89
2	232	150	217.1	124	116	64	15	183	183	152	101
2 1/2	232	150	350.0	166	149	85	15	233	234	270	136
3	232	150	490.0	200	161	105	15	254	255	270	141
4	232	150	770.0	238	178	123	22	301	302	320	164

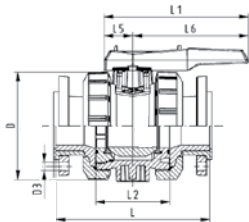
L4 [mm]	L5 [mm]	L6 [mm]	M	Z [mm]
25	32	45	M6	67
25	32	45	M6	61
25	39	58	M6	70
25	39	58	M6	76
45	54	74	M8	90
45	54	74	M8	94
45	66	87	M8	107
70	64	206	M8	144
70	64	206	M8	151
120	64	256	M12	174



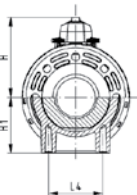
With PVC/CPVC flanges, ANSI



Inch	psi	Cv-value [gal/min]	D [mm]	D3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	Z [mm]
1/2	150	12.9	50	16	57	26	149	77	56	25	32	45	61
3/4	150	24.5	58	16	67	30	165	97	65	25	39	58	70
1	150	49.0	68	16	73	36	184	97	71	25	39	58	76
1 1/4	150	70.0	84	16	90	44	206	128	85	45	54	74	90
1 1/2	150	112.0	97	16	97	51	221	128	89	45	54	74	94
2	150	217.1	124	16	116	64	251	152	101	45	66	87	107



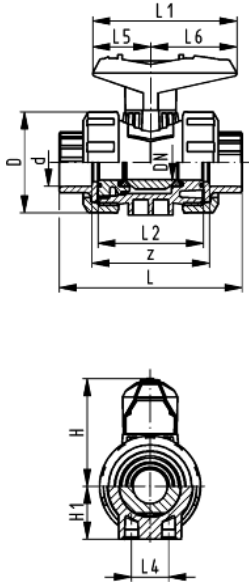
With backing flanges PVC ASTM/ANSI



Inch	psi	Cv-value [gal/min]	D [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M
2 1/2	150	350.0	166	19	311	270	136	70	64	206	149	85	M8
3	150	490.0	200	19	343	270	141	70	64	206	161	105	M8
4	150	770.0	238	19	397	320	164	120	64	256	178	123	M12

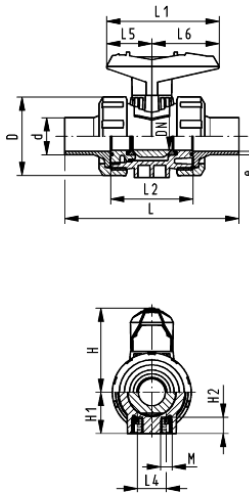
PROGEF® Standard

Ball Valve type 546 PP With mounting inserts With fusion sockets metric



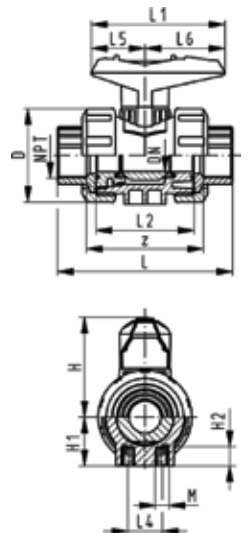
d [mm]	psi	Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	Z [mm]
16	150	4.9	50	57	27	12	93	77	56	25	32	45	M6	67
20	150	12.9	50	57	27	12	95	77	56	25	32	45	M6	66
25	150	24.5	58	67	30	12	109	97	65	25	39	58	M6	77
32	150	49.0	68	73	36	12	119	97	71	25	39	58	M6	83
40	150	70.0	84	90	44	15	135	128	85	45	54	74	M8	99
50	150	112.0	97	97	51	15	147	128	89	45	54	74	M8	105
63	150	217.0	124	116	64	15	168	152	101	45	66	87	M8	117
75	150	350.0	166	149	85	15	233	270	136	70	64	206	M8	167
90	150	490.0	200	161	105	15	254	270	141	70	64	206	M8	180
110	150	770.0	238	178	123	22	301	320	164	120	64	256	M12	215

With butt fusion spigots IR-Plus SDR11 metric



d [mm]	psi	Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	150	12.9	50	57	27	12	130	77	56	25	32	45	M6	1.9
25	150	24.5	58	67	30	12	143	97	65	25	39	58	M6	2.3
32	150	49.0	68	73	36	12	150	97	71	25	39	58	M6	3
40	150	70.0	84	90	44	15	171	128	85	45	54	74	M8	3.7
50	150	112.0	97	97	51	15	191	128	89	45	54	74	M8	4.6
63	150	217.1	124	116	64	15	220	152	101	45	66	87	M8	5.8
75	150	350.0	166	149	85	15	266	270	136	70	64	206	M8	8.2
90	150	490.0	200	161	105	15	264	270	141	70	64	206	M8	9.9
110	150	770.0	238	178	123	22	301	320	164	120	64	256	M12	12

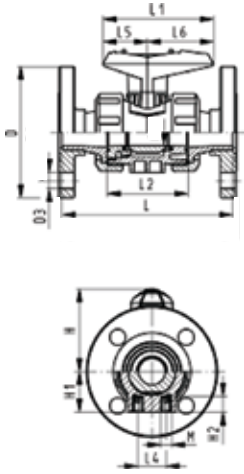
With threaded NPT



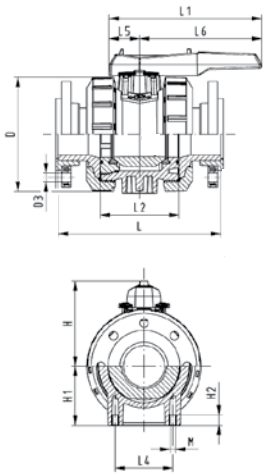
Inch	psi	Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	Z [mm]
3/8	150	4.9	50	57	27	12	96	77	56	25	32	45	M6	71
1/2	150	12.9	50	57	27	12	99	77	56	25	32	45	M6	64
3/4	150	24.5	58	67	30	12	111	97	65	25	39	58	M6	76
1	150	49.0	68	73	36	12	127	97	71	25	39	58	M6	83
1 1/4	150	70.0	84	90	44	15	146	128	85	45	54	74	M8	100
1 1/2	150	112.0	97	97	51	15	157	128	89	45	54	74	M8	111
2	150	217.1	124	116	64	15	183	152	101	45	66	87	M8	134

PROGEF® Standard

With ANSI flanges PP



Inch	psi	Cv-value [gal/min]	D [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
1/2	150	12.9	50	16	57	26	12	166	77	56	25	32	45	M6
3/4	150	24.5	58	16	67	30	12	177	97	65	25	39	58	M6
1	150	49.0	68	16	73	36	12	191	97	71	25	39	58	M6
1 1/4	150	70.0	84	16	90	44	15	209	128	85	45	54	74	M6
1 1/2	150	112.0	97	16	97	51	15	229	128	89	45	54	74	M6
2	150	217.0	124	16	116	64	15	253	152	101	45	66	87	M6

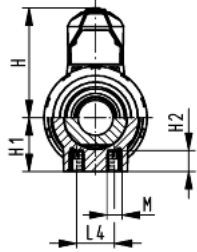
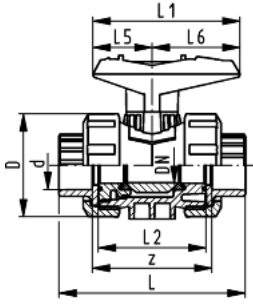


With backing flanges PP ANSI

Inch	psi	Cv-value [gal/min]	D [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M
2 1/2	150	350.0	166	19	416	379	136	70	64	206	149	85	M8
3	150	490.0	200	19	414	419	141	70	64	206	161	105	M8
4	150	770.0	238	19	451	456	164	120	64	206	178	123	M12

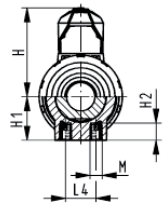
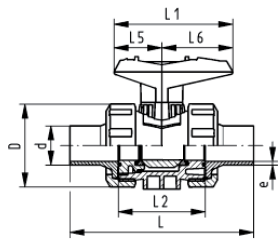
SYGEF® Standard

Ball Valve Type 546 PVDF With mounting inserts With fusion sockets metric

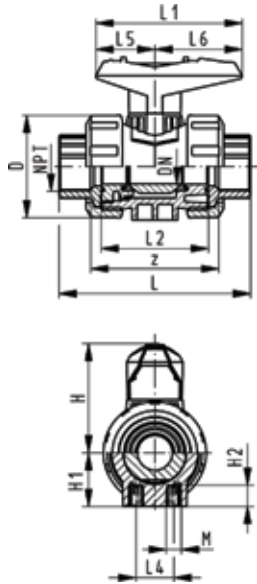


d [mm]	psi	Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	Z [mm]
16	232	4.9	50	57	27	12	93	77	56	25	32	45	M6	67
20	232	12.9	50	57	27	12	95	77	56	25	32	45	M6	66
25	232	24.5	58	67	30	12	109	97	65	25	39	58	M6	77
32	232	49.0	68	73	36	12	119	97	71	25	39	58	M6	83
40	232	70.0	84	90	44	15	135	128	85	45	54	74	M8	99
50	232	112.0	97	97	51	15	147	128	89	45	54	74	M8	105
63	232	217.1	124	116	64	15	168	152	101	45	66	87	M8	117

With butt fusion spigots metric

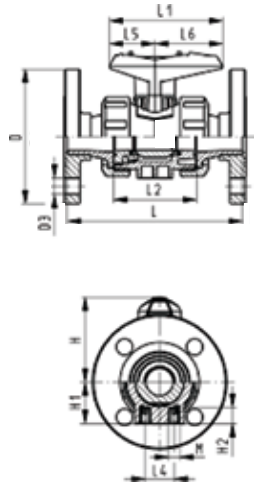


d [mm]	psi	Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	232	12.9	50	57	27	12	130	77	56	25	32	45	M6	1.9
25	232	24.5	58	67	30	12	143	97	65	25	39	58	M6	1.9
32	232	49.0	68	73	36	12	150	97	71	25	39	58	M6	2.4
40	232	70.0	84	90	44	15	171	128	85	45	54	74	M8	2.4
50	232	112.0	97	97	51	15	191	128	89	45	54	74	M8	3
63	232	217.1	124	116	64	15	220	152	101	45	66	87	M8	3



With threaded NPT

Inch	psi	Cv-value [gal/min]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	150	4.9	50	57	27	12	96	77	56	25	32	45	M6	69
1/2	150	12.9	50	57	27	12	99	77	56	25	32	45	M6	64
3/4	150	24.5	58	67	30	12	111	97	65	25	39	58	M6	76
1	150	49.0	68	73	36	12	127	97	71	25	39	58	M6	83
1 1/4	150	70.0	84	90	44	15	146	128	85	45	54	74	M8	101
1 1/2	150	112.0	97	97	51	15	157	128	89	45	54	74	M8	111
2	150	217.1	124	116	64	15	183	152	101	45	66	87	M8	135



With ANSI flanges PVDF serrated

Inch	psi	Cv-value [gal/min]	D [mm]	D 3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
1/2	150	12.9	50	16	57	26	12	174	77	56	25	32	45	M6
3/4	150	24.5	58	16	67	30	12	189	97	65	25	39	58	M6
1	150	49.0	68	16	73	36	12	199	97	71	25	39	58	M6
1 1/4	150	70.0	84	16	90	44	15	235	128	85	45	54	74	M8
1 1/2	150	112.0	97	16	97	51	15	243	128	89	45	54	74	M8
2	150	217.1	124	19	116	64	15	261	152	101	45	66	87	M8

GF Piping Systems Product Lines

Piping Systems

Schedule 40 PVC
Hi-Strength Schedule 80 PVC and CPVC
PROGEF® Polypropylene
PPro-Seal™ Natural Polypropylene
PROGEF® Natural PP-n Polypropylene
SYGEF® Plus PVDF
FuseBond™ PFA Schedule 40
Fuseal® Corrosive Waste System
Contain-It™ Secondary Containment
Fusion Technology:

- Electro fusion featuring the MSA 250SE
- Socket fusion featuring the SG 110
- IR Plus®
- BCF Plus®

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Solenoid Valves
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