

flowmeters & pumps

Increasing levels of automation in process systems inevitably requires the greater use of equipment to accurately measure and subsequently control flow, pH, ORP (Redox), conductivity, temperature or pressure.

Of key importance is the need to have equipment which is simple to operate, easy to maintain, and provide reliable measurement results.

Suitable for use with water, aqueous or aggressive liquids (and gases), our range of flow measurement products are designed to fulfil a wide range of applications, from simple visible indication using variable area flow meters, to the sophisticated analytical controls used typically in chemical dosing or water and waste water treatment.

The choice of equipment is wide and requires careful consideration. Our Customer Services Team are trained to assist with the selection of the correct products, but to help us give the best advice, please copy and complete the enquiry sheet, so that we get a complete understanding of your requirements.

Plastic bodied pumps provide an ideal solution to the problems associated with the delivery of corrosive liquids. They combine superb chemical resistance with the proven reliability of engineered pumps, giving long-term, trouble-free performance.

The ASV Stübbe range is manufactured using the latest thermoplastic materials - Polypropylene, Polyethylene and PVDF - providing resistance to a wide range of chemical fluids including acids, bases and solvents.

Section Guide

Flowmeters and Sensors	
ASV Stubbe Variable Area Flowmeters	468
Durapipe Variable Area Flowmeters	476
Blue-White Variable Area Flowmeters	480
Blue-White Digital Flowmeters	494
Flow X3 Flow Monitoring	500
Pumps	
Chemical Pumps	506
Close Coupled Pumps	507
Vertical Sump Pumps	508
Small Capacity Pumps	511
Peripheral Pumps	512
Centrifugal Pumps	513
Eccentric Pumps	514
Magnetic Pumps	515

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The ASV Stübbe variable area flowmeter uses a precision moulded transparent tube with a tapered bore, into which is fitted a conical weighted float.

The media (water, air, liquid or gaseous chemicals) flows vertically from the bottom to the top. As it passes through the tube, it displaces the float and raises it to a point where equilibrium is established between the lifting force of the media and the weight of the float. The top edge of the float directly indicates the flow volume on the graduated tube scale.

- ✓ **Materials for most media: PVC-U, Polyamide (PA), Polysulfone (PSU) and PVDF**
- ✓ **Float manufactured from PVDF or Stainless Steel**
- ✓ **Optional magnetic float for use with limit switches**
- ✓ **Piping connections to PVC-U, Polypropylene and PVDF**
- ✓ **Two visible scales on each meter: flow rate and percentage (DFM 335 and DFM 350 only)**
- ✓ **Standard scales in L/hr, optional m³/hr or GPM**

ASV Stübbe Flowmeter Programme Overview

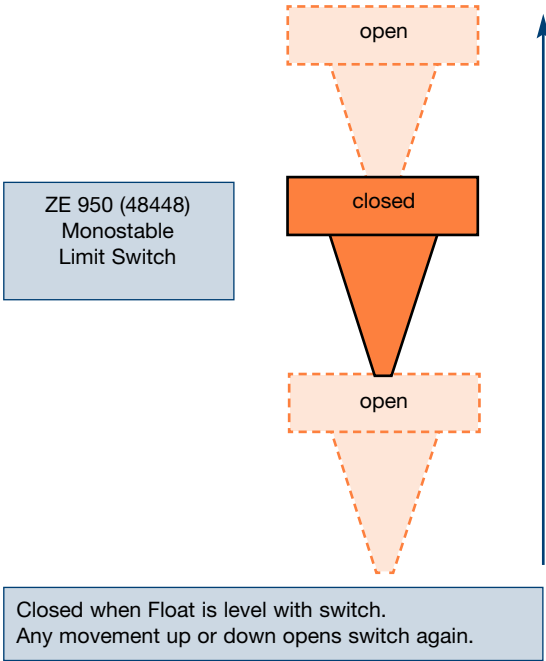
Measuring Range ¹⁾ l/hr	DN		Series DFM					
	MM	Inch	165	170	185	200	335	350
3-24	10	-	●					
5-60	10	-	●					
10-100	10	-	●					
25-250	10	-	●					
5-50	15	1/2"		●				
15-150	15	1/2"		●				
25-250	15	1/2"		●				
40-400	15	1/2"		●				
15-150	20	3/4"				●		
40-400	20	3/4"				●		
60-600	20	3/4"				●		
100-1000	20	3/4"				●		
15-150	25	1"						●
25-250	25	1"				●		
30-300	25	1"						●
40-400	25	1"				●		
60-600	25	1"					●	●
100-1000	25	1"				●	●	●
150-1500	25	1"				●		
150-1500	32	1 1/4"						●
250-2500	32	1 1/4"						●
200-2000	40	1 1/2"					●	●
300-3000	40	1 1/2"					●	●
400-4000	50	2"						●
600-6000	50	2"					●	●
1000-10000	50	2"					●	●
1500-15000	63	2 1/2"						●
2500-25000	63	2 1/2"					●	●
10000-50000	63	2 1/2"					●	●

1) With water at 20°C

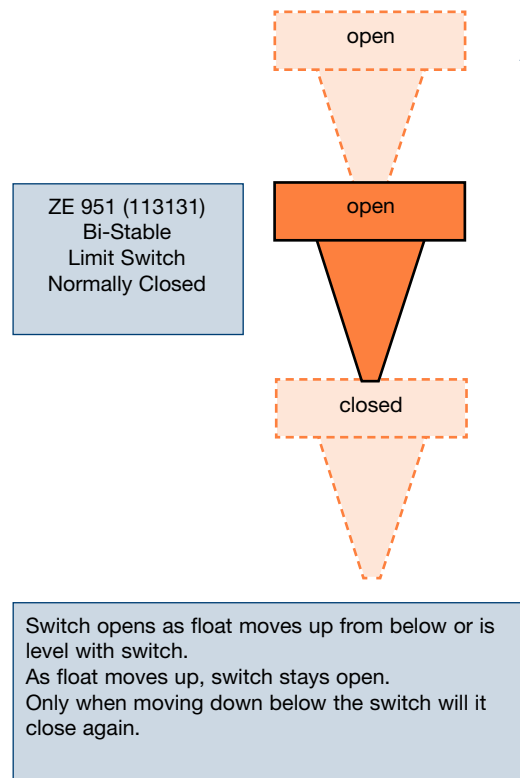
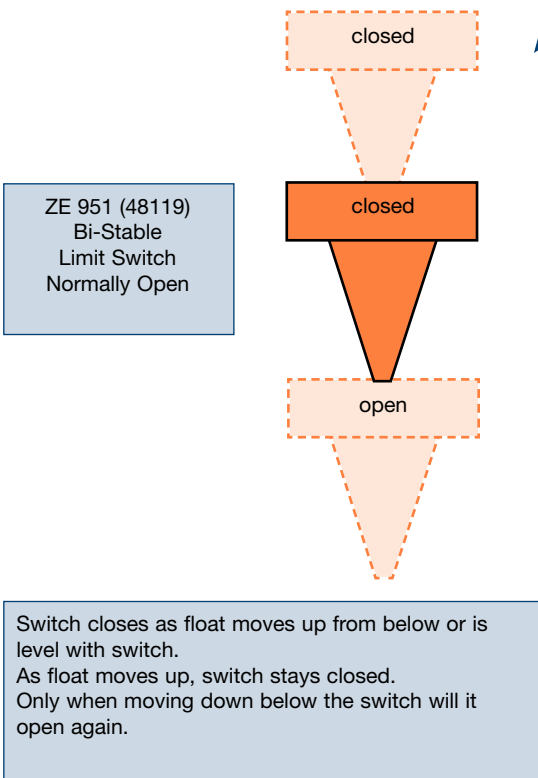


VAFM Limit Switch Functions

Monostable



Bi-Stable



variable area flowmeters

ASV Stubbe DFM 165 Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVC-U: 60°C PA: 75°C PSU: 100°C
Accuracy: ±2.5% full scale
Scaling: L/hr H₂O standard plus 0-100% max flow.
Special scales (on request): Air; US GPM; NaOH; FeCl
Length: 165mm



PVC-U MM Solvent Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
3-24	16	47500-2	80.62	47683-2	127.53	47516-2	84.87	47699-2	132.04	47532-2	89.39	47715-2	136.27
5-60	16	47501-2	80.62	47684-2	127.53	47517-2	84.87	47700-2	132.04	47533-2	89.39	47716-2	136.27
10-100	16	47502-2	80.62	47685-2	127.53	47518-2	84.87	47701-2	132.04	47534-2	89.39	47717-2	136.27
25-250	16	47503-2	80.62	47686-2	127.53	47519-2	84.87	47702-2	132.04	47535-2	89.39	47718-2	136.27

Polypropylene Fusion Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
3-24	16	47500-3	109.12	47683-3	156.27	47516-3	113.35	47699-3	160.68	47532-3	117.88	47715-3	165.05
5-60	16	47501-3	109.12	47684-3	156.27	47517-3	113.35	47700-3	160.68	47533-3	117.88	47716-3	165.05
10-100	16	47502-3	109.12	47685-3	156.27	47518-3	113.35	47701-3	160.68	47534-3	117.88	47717-3	165.05
25-250	16	47503-3	109.12	47686-3	156.27	47519-3	113.35	47702-3	160.68	47535-3	117.88	47718-3	165.05

PVDF Fusion Socket Connections

Flow Range l/h	Dia. mm	PVDF Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
3-24	16	47548	217.63	47731	258.52	47516-4	142.13	47699-4	189.88	47532-4	146.79	47715-4	193.55
5-60	16	47549	217.63	47732	258.52	47517-4	142.13	47700-4	189.88	47533-4	146.79	47716-4	193.55
10-100	16	47550	217.63	47733	258.52	47518-4	142.13	47701-4	189.88	47534-4	146.79	47717-4	193.55
25-250	16	47551	217.63	47734	258.52	47519-4	142.13	47702-4	189.88	47535-4	146.79	47718-4	193.55

Construction:

Tube Materials: PVC-U, PVDF, Polyamid (PA) or Polysulfone (PSU)
End Connections: PVC-U Socket or Spigot Ends Polypropylene or PVDF Sockets
Float: Fully encapsulated PVDF
Float Stops: PVDF
O-Rings: EPDM (FPM option on request)

Options and Spares:

	Code	Price
Limit Reed Switch:		
ZE 950 (Monostable): Normally Open	48118	69.10
ZE 951 (Bistable): Normally Open	48119	92.02
Normally Closed	113131	92.02
Limit Value Switch (use with ZE 950):		
ZE 3060 24V DC	136244	253.66
230V AC	136245	274.89
Contact Protective Relay (use with ZE 950 or ZE 951):		
ZE 3061 24V DC	136239	302.03
230V AC	136240	330.34
Flow Data Sensor:		
ZE 3000 (2 wire)*	137251	720.12
* Flowmeter size and flow rate to be advised at time of order		
Special Scales:		
Air; US GPM; HCl; NaOH; FeCl	on application	23.68

ASV Stubbe DFM 170 Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVC-U: 60°C PA: 75°C PSU: 100°C
Accuracy: ±2.5% full scale
Scaling: L/hr H₂O standard plus 0-100% max flow.
 Special scales (on request): Air; US GPM; NaOH; FeCl
Length: 170mm



PVC-U Inch Solvent Socket Connections

Flow Range l/h	Dia. inch	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
5-50	1/2	47504-1	84.87	47687-1	132.04	47520-1	89.39	47703-1	136.27	47536-1	94.66	47719-1	141.68
15-150	1/2	47505-1	84.87	47688-1	132.04	47521-1	89.39	47704-1	136.27	47537-1	94.66	47720-1	141.68
25-250	1/2	47506-1	84.87	47689-1	132.04	47522-1	89.39	47705-1	136.27	47538-1	94.66	47721-1	141.68
40-400	1/2	47507-1	84.87	47690-1	132.04	47523-1	89.39	47706-1	136.27	47539-1	94.66	47722-1	141.68

PVC-U MM Solvent Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
5-50	20	47504-2	84.87	47687-2	132.04	47520-2	89.39	47703-2	136.27	47536-2	94.66	47719-2	141.68
15-150	20	47505-2	84.87	47688-2	132.04	47521-2	89.39	47704-2	136.27	47537-2	94.66	47720-2	141.68
25-250	20	47506-2	84.87	47689-2	132.04	47522-2	89.39	47705-2	136.27	47538-2	94.66	47721-2	141.68
40-400	20	47507-2	84.87	47690-2	132.04	47523-2	89.39	47706-2	136.27	47539-2	94.66	47722-2	141.68

Polypropylene Fusion Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
5-50	20	47504-3	116.86	47687-3	164.33	47520-3	121.37	47703-3	168.70	47536-3	126.63	47719-3	173.81
15-150	20	47505-3	116.86	47688-3	164.33	47521-3	121.37	47704-3	168.70	47537-3	126.63	47720-3	173.81
25-250	20	47506-3	116.86	47689-3	164.33	47522-3	121.37	47705-3	168.70	47538-3	126.63	47721-3	173.81
40-400	20	47507-3	116.86	47690-3	164.33	47523-3	121.37	47706-3	168.70	47539-3	126.63	47722-3	173.81

PVDF Fusion Socket Connections

Flow Range l/h	Dia. mm	PVDF Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
5-50	20	47552	230.06	47735	270.20	47520-4	148.98	47703-4	196.45	47536-4	154.82	47719-4	201.57
15-150	20	47553	230.06	47736	270.20	47521-4	148.98	47704-4	196.45	47537-4	154.82	47720-4	201.57
25-250	20	47554	230.06	47737	270.20	47522-4	148.98	47705-4	196.45	47538-4	154.82	47721-4	201.57
40-400	20	47555	230.06	47738	270.20	47523-4	148.98	47706-4	196.45	47539-4	154.82	47722-4	201.57

Construction:

Tube Materials: PVC-U, PVDF, Polyamid (PA) or Polysulfone (PSU)
End Connections: PVC-U Socket or Spigot Ends Polypropylene or PVDF Sockets
Float: Fully encapsulated PVDF
Float Stops: PVDF
O-Rings: EPDM (FPM option on request)

Options and Spares:

	Code	Price
Limit Reed Switch:		
ZE 950 (Monostable): Normally Open	48118	69.10
ZE 951 (Bistable): Normally Open	48119	92.02
Normally Closed	113131	92.02
Limit Value Switch (use with ZE 950):		
ZE 3060 24V DC	136244	253.66
230V AC	136245	274.89
Contact Protective Relay (use with ZE 950 or ZE 951):		
ZE 3061 24V DC	136239	302.03
230V AC	136240	330.34
Flow Data Sensor:		
ZE 3000 (2 wire)*	137251	720.12
* Flowmeter size and flow rate to be advised at time of order		
Special Scales:		
Air; US GPM; HCl; NaOH; FeCl on application		23.68

variable area flowmeters

ASV Stubbe DFM 185 Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVC-U: 60°C PA: 75°C PSU: 100°C
Accuracy: ±2.5% full scale
Scaling: L/hr H₂O standard plus 0-100% max flow.
 Special scales (on request): Air; US GPM; NaOH; FeCl
Length: 185mm



PVC-U Inch Solvent Socket Connections

Flow Range l/h	Dia. inch	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price
15-150	3/4	47508-1	89.39	47691-1	136.27	47524-1	94.66	47707-1	141.68	47540-1	103.56	47723-1	150.44
40-400	3/4	47509-1	89.39	47692-1	136.27	47525-1	94.66	47708-1	141.68	47541-1	103.56	47724-1	150.44
60-600	3/4	47510-1	89.39	47693-1	136.27	47526-1	94.66	47709-1	141.68	47542-1	103.56	47725-1	150.44
100-1000	3/4	47511-1	89.39	47694-1	136.27	47527-1	94.66	47710-1	141.68	47543-1	103.56	47726-1	150.44

PVC-U MM Solvent Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price
15-150	25	47508-2	89.39	47691-2	136.27	47524-2	94.66	47707-2	141.68	47540-2	103.56	47723-2	150.44
40-400	25	47509-2	89.39	47692-2	136.27	47525-2	94.66	47708-2	141.68	47541-2	103.56	47724-2	150.44
60-600	25	47510-2	89.39	47693-2	136.27	47526-2	94.66	47709-2	141.68	47542-2	103.56	47725-2	150.44
100-1000	25	47511-2	89.39	47694-2	136.27	47527-2	94.66	47710-2	141.68	47543-2	103.56	47726-2	150.44

Polypropylene Fusion Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price
15-150	25	47508-3	123.56	47691-3	170.89	47524-3	128.83	47707-3	176.00	47540-3	137.74	47723-3	184.77
40-400	25	47509-3	123.56	47692-3	170.89	47525-3	128.83	47708-3	176.00	47541-3	137.74	47724-3	184.77
60-600	25	47510-3	123.56	47693-3	170.89	47526-3	128.83	47709-3	176.00	47542-3	137.74	47725-3	184.77
100-1000	25	47511-3	123.56	47694-3	170.89	47527-3	128.83	47710-3	176.00	47543-3	137.74	47726-3	184.77

PVDF Fusion Socket Connections

Flow Range l/h	Dia. mm	PVDF Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price	Standard Float Code	Standard Float Price	Magnetic Float Code	Magnetic Float Price
15-150	25	47556	242.45	47739	281.91	47524-4	164.33	47707-4	211.78	47540-4	173.81	47723-4	220.55
40-400	25	47557	242.45	47740	281.91	47525-4	164.33	47708-4	211.78	47541-4	173.81	47724-4	220.55
60-600	25	47558	242.45	47741	281.91	47526-4	164.33	47709-4	211.78	47542-4	173.81	47725-4	220.55
100-1000	25	47559	242.45	47742	281.91	47527-4	164.33	47710-4	211.78	47543-4	173.81	47726-4	220.55

Construction:

Tube Materials: PVC-U, PVDF, Polyamid (PA) or Polysulfone (PSU)
End Connections: PVC-U Socket or Spigot Ends Polypropylene or PVDF Sockets
Float: Fully encapsulated PVDF
Float Stops: PVDF
O-Rings: EPDM (FPM option on request)

Options and Spares:

	Code	Price
Limit Reed Switch:		
ZE 950 (Monostable):	Normally Open 48118	69.10
ZE 951 (Bistable):	Normally Open 48119	92.02
	Normally Closed 113131	92.02
Limit Value Switch (use with ZE 950):		
ZE 3060	24V DC 136244	253.66
	230V AC 136245	274.89
Contact Protective Relay (use with ZE 950 or ZE 951):		
ZE 3061	24V DC 136239	302.03
	230V AC 136240	330.34
Flow Data Sensor:		
ZE 3000 (2 wire)*	137251	720.12
* Flowmeter size and flow rate to be advised at time of order		
Special Scales:		
Air; US GPM; HCl; NaOH; FeCl	on application	23.68

ASV Stubbe DFM 200 Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVC-U: 60°C PA: 75°C PSU: 100°C
Accuracy: ±2.5% full scale
Scaling: L/hr H₂O standard plus 0-100% max flow.
 Special scales (on request): Air; US GPM; NaOH; FeCl
Length: 200mm



PVC-U Inch Solvent Socket Connections

Flow Range l/h	Dia. inch	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
25-250	1	47512-1	99.18	47695-1	145.94	47528-1	103.56	47711-1	150.44	47544-1	113.35	47727-1	160.68
40-400	1	47513-1	99.18	47696-1	145.94	47529-1	103.56	47712-1	150.44	47545-1	113.35	47728-1	160.68
100-1000	1	47514-1	99.18	47697-1	145.94	47530-1	103.56	47713-1	150.44	47546-1	113.35	47729-1	160.68
150-1500	1	47515-1	99.18	47698-1	145.94	47531-1	103.56	47714-1	150.44	47547-1	113.35	47730-1	160.68

PVC-U MM Solvent Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
25-250	32	47512-2	99.18	47695-2	145.94	47528-2	103.56	47711-2	150.44	47544-2	113.35	47727-2	160.68
40-400	32	47513-2	99.18	47696-2	145.94	47529-2	103.56	47712-2	150.44	47545-2	113.35	47728-2	160.68
100-1000	32	47514-2	99.18	47697-2	145.94	47530-2	103.56	47713-2	150.44	47546-2	113.35	47729-2	160.68
150-1500	32	47515-2	99.18	47698-2	145.94	47531-2	103.56	47714-2	150.44	47547-2	113.35	47730-2	160.68

Polypropylene Fusion Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
25-250	32	47512-3	138.17	47695-3	185.47	47528-3	142.56	47711-3	189.88	47544-3	152.64	47727-3	199.37
40-400	32	47513-3	138.17	47696-3	185.47	47529-3	142.56	47712-3	189.88	47545-3	152.64	47728-3	199.37
100-1000	32	47514-3	138.17	47697-3	185.47	47530-3	142.56	47713-3	189.88	47546-3	152.64	47729-3	199.37
150-1500	32	47515-3	138.17	47698-3	185.47	47531-3	142.56	47714-3	189.88	47547-3	152.64	47730-3	199.37

PVDF Fusion Socket Connections

Flow Range l/h	Dia. mm	PVDF Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
25-250	32	47560	266.57	47743	306.00	47528-4	193.55	47711-4	241.00	47544-4	203.76	47727-4	250.48
40-400	32	47561	266.57	47744	306.00	47529-4	193.55	47712-4	241.00	47545-4	203.76	47728-4	250.48
100-1000	32	47562	266.57	47745	306.00	47530-4	193.55	47713-4	241.00	47546-4	203.76	47729-4	250.48
150-1500	32	47563	266.57	47746	306.00	47531-4	193.55	47714-4	241.00	47547-4	203.76	47730-4	250.48

Construction:

Tube Materials: PVC-U, PVDF, Polyamid (PA) or Polysulfone (PSU)
End Connections: PVC-U Socket or Spigot Ends Polypropylene or PVDF Sockets
Float: Fully encapsulated PVDF
Float Stops: PVDF
O-Rings: EPDM (FPM option on request)

Options and Spares:

	Code	Price
Limit Reed Switch:		
ZE 950 (Monostable):	Normally Open 48118	69.10
ZE 951 (Bistable):	Normally Open 48119	92.02
	Normally Closed 113131	92.02
Limit Value Switch (use with ZE 950):		
ZE 3060	24V DC 136244	253.66
	230V AC 136245	274.89
Contact Protective Relay (use with ZE 950 or ZE 951):		
ZE 3061	24V DC 136239	302.03
	230V AC 136240	330.34
Flow Data Sensor:		
ZE 3000 (2 wire)*	137251	720.12
* Flowmeter size and flow rate to be advised at time of order		
Special Scales:		
Air; US GPM; HCl; NaOH; FeCl	on application	23.68

ASV Stubbe DFM 350 Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVC-U: 60°C PA: 75°C PSU: 100°C
Accuracy: ±2.5% full scale
Scaling: L/hr H₂O standard plus 0-100% max flow.
 Special scales (on request): Air; US GPM; NaOH; FeCl
Length: 350mm



PVC-U Inch Solvent Socket Connections

Flow Range l/h	Dia. inch	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
15-150	1	127854-1	113.79	127856-1	156.27	127857-1	126.51	127859-1	168.70	127860-1	147.51	127862-1	189.14
30-300	1	46275-1	113.79	47579-1	156.27	46302-1	126.51	47606-1	168.70	46329-1	147.51	47633-1	189.14
60-600	1	46276-1	113.79	47580-1	156.27	46303-1	126.51	47607-1	168.70	46330-1	147.51	47634-1	189.14
100-1000	1	46277-1	113.79	47581-1	156.27	46304-1	126.51	47608-1	168.70	46331-1	147.51	47635-1	189.14
150-1500	1 1/4	46279-1	131.44	47583-1	165.05	46306-1	137.74	47610-1	171.64	46333-1	154.82	47637-1	200.09
250-2500	1 1/4	46280-1	131.44	47584-1	165.05	46307-1	137.74	47611-1	171.64	46334-1	154.82	47638-1	200.09
200-2000	1 1/2	46284-1	144.17	47588-1	178.93	46311-1	168.70	47615-1	201.57	46338-1	201.57	47642-1	235.15
300-3000	1 1/2	46285-1	144.17	47589-1	178.93	46312-1	168.70	47616-1	201.57	46339-1	201.57	47643-1	235.15
400-4000	2	46289-1	211.06	47593-1	251.96	46316-1	222.00	47620-1	262.91	46343-1	275.33	47647-1	315.47
600-6000	2	46290-1	211.06	47594-1	251.96	46317-1	222.00	47621-1	262.91	46344-1	275.33	47648-1	315.47
1000-10000	2	46291-1	211.06	47595-1	251.96	46318-1	222.00	47622-1	262.91	46345-1	275.33	47649-1	315.47
1500-15000	2 1/2	46295-1	396.54	47599-1	436.72	46322-1	422.84	47626-1	463.75	46349-1	510.48	47653-1	550.62
2500-25000	2 1/2	46296-1	396.54	47600-1	436.72	46323-1	422.84	47627-1	463.75	46350-1	510.48	47654-1	550.62
10000-50000	2 1/2	127865-1	396.54	127867-1	436.72	127868-1	422.84	127870-1	463.75	127871-1	510.48	127873-1	550.62

PVC-U MM Solvent Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
15-150	32	127854-2	113.79	127856-2	156.27	127857-2	126.51	127859-2	168.70	127860-2	147.51	127862-2	189.14
30-300	32	46275-2	113.79	47579-2	156.27	46302-2	126.51	47606-2	168.70	46329-2	147.51	47633-2	189.14
60-600	32	46276-2	113.79	47580-2	156.27	46303-2	126.51	47607-2	168.70	46330-2	147.51	47634-2	189.14
100-1000	32	46277-2	113.79	47581-2	156.27	46304-2	126.51	47608-2	168.70	46331-2	147.51	47635-2	189.14
150-1500	40	46279-2	131.44	47583-2	165.05	46306-2	137.74	47610-2	171.64	46333-2	154.82	47637-2	200.09
250-2500	40	46280-2	131.44	47584-2	165.05	46307-2	137.74	47611-2	171.64	46334-2	154.82	47638-2	200.09
200-2000	50	46284-2	144.17	47588-2	178.93	46311-2	168.70	47615-2	201.57	46338-2	201.57	47642-2	235.15
300-3000	50	46285-2	144.17	47589-2	178.93	46312-2	168.70	47616-2	201.57	46339-2	201.57	47643-2	235.15
400-4000	63	46289-2	211.06	47593-2	251.96	46316-2	222.00	47620-2	262.91	46343-2	275.33	47647-2	315.47
600-6000	63	46290-2	211.06	47594-2	251.96	46317-2	222.00	47621-2	262.91	46344-2	275.33	47648-2	315.47
1000-10000	63	46291-2	211.06	47595-2	251.96	46318-2	222.00	47622-2	262.91	46345-2	275.33	47649-2	315.47
1500-15000	75	46295-2	396.54	47599-2	436.72	46322-2	422.84	47626-2	463.75	46349-2	510.48	47653-2	550.62
2500-25000	75	46296-2	396.54	47600-2	436.72	46323-2	422.84	47627-2	463.75	46350-2	510.48	47654-2	550.62
10000-50000	75	127865-2	396.54	127867-2	436.72	127868-2	422.84	127870-2	463.75	127871-2	510.48	127873-2	550.62

Will it be in stock?

Last year we shipped more than **25,000** consignments, and more than

95%

were complete, first time!



Polypropylene Fusion Socket Connections

Flow Range l/h	Dia. mm	PVC-U Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
15-150	32	127854-3	170.16	127856-3	211.78	127857-3	182.59	127859-3	224.21	127860-3	186.97	127862-3	225.67
30-300	32	46275-3	170.16	47579-3	211.78	46302-3	182.59	47606-3	224.21	46329-3	186.97	47633-3	225.67
60-600	32	46276-3	170.16	47580-3	211.78	46303-3	182.59	47607-3	224.21	46330-3	186.97	47634-3	225.67
100-1000	32	46277-3	170.16	47581-3	211.78	46304-3	182.59	47608-3	224.21	46331-3	186.97	47635-3	225.67
150-1500	40	46279-3	190.62	47583-3	223.46	46306-3	197.17	47610-3	230.77	46333-3	213.98	47637-3	247.58
250-2500	40	46280-3	190.62	47584-3	223.46	46307-3	197.17	47611-3	230.77	46334-3	213.98	47638-3	247.58
200-2000	50	46284-3	232.25	47588-3	266.57	46311-3	256.34	47615-3	289.19	46338-3	289.19	47642-3	322.78
300-3000	50	46285-3	232.25	47589-3	266.57	46312-3	256.34	47616-3	289.19	46339-3	289.19	47643-3	322.78
400-4000	63	46289-3	257.80	47593-3	287.73	46316-3	265.82	47620-3	296.49	46343-3	305.27	47647-3	335.94
600-6000	63	46290-3	257.80	47594-3	287.73	46317-3	265.82	47621-3	296.49	46344-3	305.27	47648-3	335.94
1000-10000	63	46291-3	343.97	47595-3	384.14	46318-3	354.20	47622-3	395.09	46345-3	407.50	47649-3	447.67
1500-15000	75	46295-3	459.36	47599-3	489.30	46322-3	479.07	47626-3	509.75	46349-3	544.79	47653-3	574.76
2500-25000	75	46296-3	459.36	47600-3	489.30	46323-3	479.07	47627-3	509.75	46350-3	544.79	47654-3	574.76
10000-50000	75	127865-3	459.36	127867-3	489.30	127868-3	479.07	127870-3	509.75	127871-3	544.79	127873-3	574.76



PVDF Fusion Socket Connections

Flow Range l/h	Dia. mm	PVDF Tube				Polyamid Tube				Polysulfone Tube			
		Standard Float		Magnetic Float		Standard Float		Magnetic Float		Standard Float		Magnetic Float	
		Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
15-150	32	127863	302.33	127864	335.94	127857-4	254.89	127859-4	297.24	127860-4	264.36	127862-4	304.52
30-300	32	46356	302.33	47660	335.94	46302-4	254.89	47606-4	297.24	46329-4	264.36	47633-4	304.52
60-600	32	46357	302.33	47661	335.94	46303-4	254.89	47607-4	297.24	46330-4	264.36	47634-4	304.52
100-1000	32	46358	302.33	47662	335.94	46304-4	254.89	47608-4	297.24	46331-4	264.36	47635-4	304.52
150-1500	40	46360	369.52	47664	402.38	46306-4	278.24	47610-4	311.84	46333-4	295.03	47637-4	328.64
250-2500	40	46361	369.52	47665	402.38	46307-4	278.24	47611-4	311.84	46334-4	295.03	47638-4	328.64
200-2000	50	46365	436.72	47669	469.56	46311-4	355.67	47615-4	389.25	46338-4	389.25	47642-4	422.84
300-3000	50	46366	436.72	47670	469.56	46312-4	355.67	47616-4	389.25	46339-4	389.25	47643-4	422.84
400-4000	63	46370	638.26	47674	677.71	46316-4	372.44	47620-4	403.11	46343-4	411.88	47647-4	442.55
600-6000	63	46371	638.26	47675	677.71	46317-4	372.44	47621-4	403.11	46344-4	411.88	47648-4	442.55
1000-10000	63	46372	638.26	47676	677.71	46318-4	496.58	47622-4	536.78	46345-4	549.17	47649-4	590.07
1500-15000	75	46376	806.23	47680	845.65	46322-4	658.00	47626-4	688.66	46349-4	723.72	47653-4	753.64
2500-25000	75	46377	806.23	47681	845.65	46323-4	658.00	47627-4	688.66	46350-4	723.72	47654-4	753.64
10000-50000	75	127874	806.23	127875	845.65	127868-4	658.00	127870-4	688.66	127871-4	723.72	127873-4	753.64



Construction:

Tube Materials: PVC-U, PVDF, Polyamid (PA) or Polysulfone (PSU)

End Connections: PVC-U Socket or Spigot Ends Polypropylene or PVDF Sockets

Float: Fully encapsulated PVDF

Float Stops: PVDF

O-Rings: EPDM (FPM option on request)

Options and Spares:

	Code	Price
Limit Reed Switch:		
ZE 950 (Monostable):	Normally Open 48118	69.10
ZE 951 (Bistable):	Normally Open 48119	92.02
	Normally Closed 113131	92.02
Limit Value Switch (use with ZE 950):		
ZE 3060	24V DC 136244	253.66
	230V AC 136245	274.89
Contact Protective Relay (use with ZE 950 or ZE 951):		
ZE 3061	24V DC 136239	302.03
	230V AC 136240	330.34
Flow Data Sensor:		
ZE 3000 (2 wire)*	137251	720.12
* Flowmeter size and flow rate to be advised at time of order		
Special Scales:		
Air; US GPM; HCl; NaOH; FeCl	on application	23.68

Durapipe Flowmeters

- ✓ Compatible with all ABS piping systems
- ✓ Float manufactured from PVC-U or Stainless Steel
- ✓ Optional magnetic float for use with limit switches
- ✓ Inch or MM piping connections to ABS
- ✓ Standard scales in L/hr, optional m³/hr



Durapipe Flowmeter Programme Overview

Short Version

Measuring Range ¹⁾ l/hr	Connection		Length MM	PVC-U Float	
	MM	Inch		Standard	Magnetic
2-20	20	1/2"	165	●	
3.5-35	20	1/2"	165	●	
5.5-55	20	1/2"	165	●	
9-90	20	1/2"	165		●
10-100	20	1/2"	165	●	
14-140	20	1/2"	165	●	
25-250	32	1"	200		●
30-300	32	1"	200	●	
45-450	32	1"	200		●
50-500	32	1"	200	●	
65-650	32	1"	200		●
75-750	32	1"	200	●	
100-1000	32	1"	200		●
120-1200	32	1"	200	●	

1) With water at 20°C

Measuring Range ¹⁾ l/hr	Connection		Length MM	Stainless Steel Float	
	MM	Inch		Standard	Magnetic
4-40	20	1/2"	165	●	
6-60	20	1/2"	165		●
6.5-65	20	1/2"	165	●	
9.5-95	20	1/2"	165		●
10-100	20	1/2"	165	●	
16-160	20	1/2"	165	●	
24-240	32	1"	200		●
25-250	32	1"	200	●	
40-400	32	1"	200	●	
65-650	32	1"	200	●	
100-1000	32	1"	200	●	
160-1600	32	1"	200	●	

1) With water at 20°C

Standard Version

Measuring Range ¹⁾ l/hr	Connection		Length MM	PVC-U Float	
	MM	Inch		Standard	Magnetic
6-65	20	1/2"	300	●	
17.5-175	20	1/2"	300	●	
45-450	32	1"	300		●
50-500	32	1"	300	●	
70-700	32	1"	300		●
75-750	32	1"	300	●	
110-1100	32	1"	300		●
125-1250	32	1"	300	●	
175-1750	32	1"	300		●
200-2000	32	1"	300	●	
315-3150	63	2"	300	●	
500-5000	63	2"	300	●	
750-7500	63	2"	300	●	

1) With water at 20°C

Measuring Range ¹⁾ l/hr	Connection		Length MM	Stainless Steel Float	
	MM	Inch		Standard	Magnetic
12-120	20	1/2"	300		●
12.5-125	20	1/2"	300	●	
30-300	20	1/2"	300		●
31.5-315	20	1/2"	300	●	
60-600	32	1"	300		●
65-650	32	1"	300	●	
95-950	32	1"	300		●
100-1000	32	1"	300	●	
150-1500	32	1"	300		●
160-1600	32	1"	300	●	
200-2000	32	1"	300		●
250-2500	32	1"	300	●	
380-3800	63	2"	300		●
400-4000	63	2"	300	●	
640-6400	63	2"	300		●
650-6500	63	2"	300	●	
950-9500	63	2"	300		●
1000-10000	63	2"	300	●	
4000-16000	63	2"	300	●	
6000-19000	63	2"	300		●
6000-20000	63	2"	300	●	
8000-24000	63	2"	300		●
8000-25000	63	2"	300	●	

1) With water at 20°C

Durapipe ABS Flowmeter - Short Version

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PA: 75°C PSU: 80°C
Accuracy: ±2.5% full scale
Scaling: L/hour H₂O
Tube Materials: Polyamid (PA) or Polysulfone (PSU)
End Connections: ABS Solvent Socket Unions
Float: Fully encapsulated PVC-U or Stainless Steel
O-Rings: EPDM (FPM option on request)



PVC-U Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
2-20	1/2"	01 BBQ 102	122.10	01 CDA 102	126.71
3.5-35	1/2"	01 BBR 102	121.68	01 CDB 102	125.85
5.5-55	1/2"	01 BBS 102	122.09	01 CDC 102	125.85
10-100	1/2"	01 BBT 102	116.23	01 CDD 102	125.85
14-140	1/2"	01 BBU 102	118.73	01 CDE 102	129.88
30-300	1"	01 BBV 104	144.34	01 CDF 104	157.34
50-500	1"	01 BBW 104	144.34	01 CDG 104	157.34
75-750	1"	01 BBX 104	144.34	01 CDH 104	157.34
120-1200	1"	01 BBY 104	144.77	01 CDI 104	157.34

PVC-U Magnetic Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
2-20	1/2"	01 BCA 102	172.02	01 CDJ 102	178.32
3.5-35	1/2"	01 BCB 102	172.02	01 CDK 102	178.32
5.5-55	1/2"	01 BCC 102	172.02	01 CDL 102	178.32
9-90	1/2"	01 BCD 102	172.02	01 CDM 102	178.32
14-140	1/2"	01 BCE 102	197.19	01 CDN 102	205.57
25-250	1"	01 BCF 104	234.96	01 CDO 104	247.54
45-450	1"	01 BCG 104	234.96	01 CDP 104	247.54
65-650	1"	01 BCH 104	234.96	01 CDQ 104	247.54
100-1000	1"	01 BCI 104	234.96	01 CDR 104	247.54

Stainless Steel Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
4-40	1/2"	01 BCJ 102	122.10	01 CDS 102	125.86
6.5-65	1/2"	01 BCK 102	122.10	01 CDT 102	125.86
10-100	1/2"	01 BCL 102	121.68	01 CDU 102	125.86
16-160	1/2"	01 BCM 102	116.62	01 CDV 102	125.86
25-250	1/2"	01 BCN 102	124.00	01 CDW 102	130.07
40-400	1"	01 BCO 104	144.34	01 CDX 104	157.34
65-650	1"	01 BCP 104	144.34	01 CDY 104	157.34
100-1000	1"	01 BCQ 104	144.34	01 CDZ 104	157.34
160-1600	1"	01 BCR 104	144.34	01 CEA 104	157.34

Stainless Steel Magnetic Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
4-40	1/2"	01 BCS 102	172.02	01 CEB 102	178.32
6-60	1/2"	01 BCT 102	172.02	01 CEC 102	178.32
9.5-95	1/2"	01 BCU 102	172.02	01 CED 102	178.32
16-160	1/2"	01 BCV 102	172.02	01 CEE 102	178.32
24-240	1/2"	01 BCW 102	197.19	01 CEF 102	205.57
40-400	1"	01 BCX 104	234.95	01 CEG 104	247.54
65-650	1"	01 BCY 104	235.36	01 CEH 104	247.54
100-1000	1"	01 BCZ 104	235.59	01 CEI 104	247.54
160-1600	1"	01 BDA 104	234.96	01 CEJ 104	247.54

PVC-U Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
2-20	20	11 BBQ 306	122.10	11 CDA 306	126.71
3.5-35	20	11 BBR 306	122.09	11 CDB 306	125.85
5.5-55	20	11 BBS 306	121.68	11 CDC 306	125.85
10-100	20	11 BBT 306	122.09	11 CDD 306	125.85
14-140	20	11 BBU 306	118.76	11 CDE 306	129.88
30-300	32	11 BBV 308	144.76	11 CDF 308	157.34
50-500	32	11 BBW 308	144.76	11 CDG 308	157.34
75-750	32	11 BBX 308	174.54	11 CDH 308	157.34
120-1200	32	11 BBY 308	144.74	11 CDI 308	157.34

PVC-U Magnetic Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
2-20	20	11 BCA 306	172.02	11 CDJ 306	178.32
3.5-35	20	11 BCB 306	172.02	11 CDK 306	178.32
5.5-55	20	11 BCC 306	172.02	11 CDL 306	178.32
9-90	20	11 BCD 306	172.02	11 CDM 306	178.32
14-140	20	11 BCE 306	197.19	11 CDN 306	205.57
25-250	32	11 BCF 308	234.96	11 CDO 308	247.54
45-450	32	11 BCG 308	234.96	11 CDP 308	247.54
65-650	32	11 BCH 308	234.96	11 CDQ 308	247.54
100-1000	32	11 BCI 308	234.96	11 CDR 308	247.54

Stainless Steel Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
4-40	20	11 BCJ 306	121.68	11 CDS 306	125.86
6.5-65	20	11 BCK 306	122.10	11 CDT 306	125.86
10-100	20	11 BCL 306	121.68	11 CDU 306	125.86
16-160	20	11 BCM 306	147.48	11 CDV 306	125.86
25-250	20	11 BCN 306	121.69	11 CDW 306	130.07
40-400	32	11 BCO 308	144.34	11 CDX 308	157.34
65-650	32	11 BCP 308	144.34	11 CDY 308	157.34
100-1000	32	11 BCQ 308	144.76	11 CDZ 308	157.34
160-1600	32	11 BCR 308	144.76	11 CEA 308	157.34

Stainless Steel Magnetic Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
4-40	20	11 BCS 306	172.02	11 CEB 306	178.32
6-60	20	11 BCT 306	172.02	11 CEC 306	178.32
9.5-95	20	11 BCU 306	172.02	11 CED 306	178.32
16-160	20	11 BCV 306	172.02	11 CEE 306	178.32
24-240	20	11 BCW 306	197.19	11 CEF 306	205.57
40-400	32	11 BCX 308	234.95	11 CEG 308	247.53
65-650	32	11 BCY 308	234.95	11 CEH 308	247.54
100-1000	32	11 BCZ 308	234.95	11 CEI 308	247.54
160-1600	32	11 BDA 308	234.95	11 CEJ 308	247.54

Durapipe ABS Flowmeter - Standard Version

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PA: 75°C PSU: 80°C
Accuracy: ±2.5% full scale
Scaling: L/hour H₂O
Tube Materials: Polyamid (PA) or Polysulfone (PSU)
End Connections: ABS Solvent Socket Unions
Float: Fully encapsulated PVC-U or Stainless Steel
O-Rings: EPDM (FPM option on request)



PVC-U Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
6.5-65	1/2"	01 BAA 102	200.12	01 CAA 102	234.96
17.5-175	1/2"	01 BAB 102	200.12	01 CAB 102	234.96
50-500	1"	01 BAC 104	210.01	01 CAC 104	270.61
75-750	1"	01 BAD 104	210.01	01 CAD 104	270.84
125-1250	1"	01 BAE 104	266.43	01 CAE 104	340.89
200-2000	1"	01 BAF 104	266.43	01 CAF 104	340.89
315-3150	2"	01 BAG 107	417.47	01 CAG 107	507.69
500-5000	2"	01 BAH 107	417.47	01 CAH 107	507.69
750-7500	2"	01 BAI 107	417.47	01 CAI 107	507.69

PVC-U Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
6.5-65	20	11 BAA 306	200.12	11 CAA 306	234.96
17.5-175	20	11 BAB 306	200.12	11 CAB 306	234.96
50-500	32	11 BAC 308	210.01	11 CAC 308	270.61
75-750	32	11 BAD 308	210.01	11 CAD 308	270.84
125-1250	32	11 BAE 308	266.22	11 CAE 308	340.88
200-2000	32	11 BAF 308	266.22	11 CAF 308	340.88
315-3150	63	11 BAG 311	417.49	11 CAG 311	507.69
500-5000	63	11 BAH 311	417.49	11 CAH 311	507.69
750-7500	63	11 BAI 311	417.47	11 CAI 311	507.69

PVC-U Magnetic Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
6.5-65	1/2"	01 BAV 102	271.45	01 CEV 102	327.26
17.5-175	1/2"	01 BAW 102	271.45	01 CEW 102	327.26
45-450	1"	01 BAX 104	340.89	01 CEX 104	402.79
70-700	1"	01 BAY 104	341.94	01 CEY 104	402.79
110-1100	1"	01 BAZ 104	394.41	01 CEZ 104	478.31
175-1750	1"	01 BBA 104	395.43	01 CBA 104	478.31
315-3150	2"	01 BBB 107	660.82	01 CBB 107	811.86
500-5000	2"	01 BBC 107	660.82	01 CBC 107	811.86
750-7500	2"	01 BBD 107	660.82	01 CBD 107	811.86

PVC-U Magnetic Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
6.5-65	20	11 BAV 306	271.45	11 CEV 306	327.26
17.5-175	20	11 BAW 306	271.45	11 CEW 306	327.26
45-450	32	11 BAX 308	340.89	11 CEX 308	402.79
70-700	32	11 BAY 308	341.94	11 CEY 308	402.79
110-1100	32	11 BAZ 308	394.41	11 CEZ 308	478.31
175-1750	32	11 BBA 308	395.43	11 CBA 308	478.31
315-3150	63	11 BBB 311	660.82	11 CBB 311	811.86
500-5000	63	11 BBC 311	660.82	11 CBC 311	811.86
750-7500	63	11 BBD 311	660.82	11 CBD 311	811.86

Don't see what you want?

We have access to a huge range of products that are not featured in our Handbook.

If you don't see what you want, give our team a call.



Durapipe ABS Flowmeter - Standard Version

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PA: 75°C PSU: 80°C
Accuracy: ±2.5% full scale
Scaling: L/hour H₂O
Tube Materials: Polyamid (PA) or Polysulfone (PSU)
End Connections: ABS Solvent Socket Unions
Float: Fully encapsulated PVC-U or Stainless Steel
O-Rings: EPDM (FPM option on request)



Stainless Steel Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
12.5-125	1/2"	01 BAJ 102	191.55	01 CAJ 102	234.95
31.5-315	1/2"	01 BAK 102	200.12	01 CAK 102	234.96
65-650	1"	01 BAL 104	210.01	01 CAL 104	270.63
100-1000	1"	01 BAM 104	210.01	01 CAM 104	259.29
160-1600	1"	01 BAN 104	266.22	01 CAN 104	341.94
250-2500	1"	01 BAO 104	266.22	01 CAO 104	340.89
400-4000	2"	01 BAP 107	399.63	01 CAP 107	507.70
650-6500	2"	01 BAQ 107	417.47	01 CAQ 107	507.70
1000-10000	2"	01 BAR 107	417.47	01 CAR 107	507.70
4000-16000	2"	01 BAS 107	660.82	01 CAS 107	891.61
6000-20000	2"	01 BAT 107	660.82	01 CAT 107	891.60
8000-25000	2"	01 BAU 107	744.75	01 CAU 107	891.60

Stainless Steel Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
12.5-125	20	11 BAJ 306	200.12	11 CAJ 306	234.95
31.5-315	20	11 BAK 306	200.12	11 CAK 306	234.95
65-650	32	11 BAL 308	210.01	11 CAL 308	270.63
100-1000	32	11 BAM 308	210.01	11 CAM 308	259.29
160-1600	32	11 BAN 308	266.22	11 CAN 308	340.59
250-2500	32	11 BAO 308	264.33	11 CAO 308	340.88
400-4000	63	11 BAP 311	417.47	11 CAP 311	506.63
650-6500	63	11 BAQ 311	417.47	11 CAQ 311	506.63
1000-10000	63	11 BAR 311	417.47	11 CAR 311	507.69
4000-16000	63	11 BAS 311	660.82	11 CAS 311	891.60
6000-20000	63	11 BAT 311	660.82	11 CAT 311	891.60
8000-25000	63	11 BAU 311	744.75	11 CAU 311	891.60

Stainless Steel Magnetic Float

Inch Solvent Socket Connections

Flow Range l/hr	Connec. Inch	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
12-120	1/2"	01 BBE 102	285.31	01 CBE 102	327.27
30-300	1/2"	01 BBF 102	285.31	01 CBF 102	327.27
60-600	1"	01 BBG 104	341.92	01 CBG 104	402.78
95-950	1"	01 BBH 104	341.92	01 CBH 104	402.78
150-1500	1"	01 BBI 104	394.41	01 CBI 104	478.31
200-2000	1"	01 BBJ 104	394.41	01 CBJ 104	478.31
380-3800	2"	01 BBK 107	660.82	01 CBK 107	811.85
640-6400	2"	01 BBL 107	660.82	01 CBL 107	811.85
950-9500	2"	01 BBM 107	662.94	01 CBM 107	811.85
4000-16000	2"	01 BBN 107	1023.73	01 CBN 107	1286.01
6000-19000	2"	01 BBO 107	1023.73	01 CBO 107	1286.01
8000-24000	2"	01 BBP 107	1118.17	01 CBP 107	1286.01

Stainless Steel Magnetic Float

MM Solvent Socket Connections

Flow Range l/hr	Connec. mm	Polyamid Tube		Polysulfone Tube	
		Code	Price	Code	Price
12-120	20	11 BBE 306	285.31	11 CBE 306	327.27
30-300	20	11 BBF 306	285.31	11 CBF 306	327.27
60-600	32	11 BBG 308	340.89	11 CBG 308	402.78
95-950	32	11 BBH 308	341.92	11 CBH 308	402.78
150-1500	32	11 BBI 308	394.41	11 CBI 308	478.31
200-2000	32	11 BBJ 308	394.41	11 CBJ 308	478.31
380-3800	63	11 BBK 311	660.82	11 CBK 311	811.85
640-6400	63	11 BBL 311	660.82	11 CBL 311	811.85
950-9500	63	11 BBM 311	662.93	11 CBM 311	811.85
4000-16000	63	11 BBN 311	1023.73	11 CBN 311	1286.01
6000-19000	63	11 BBO 311	1023.73	11 CBO 311	1286.01
8000-24000	63	11 BBP 311	1118.17	11 CBP 311	1286.01

variable area flowmeters



The Blue-White variable area flowmeter uses a precision manufactured transparent tube with a tapered bore, into which is fitted a conical weighted float.

The media (water, air, liquid or gaseous chemicals) flows vertically from the bottom to the top. As it passes through the tube, it displaces the float and raises it to a point where equilibrium is established between the lifting force of the media and the weight of the float. The top edge of the float directly indicates the flow volume on the graduated tube scale.

Blue-White manufacture a wide range of variable area flowmeters from corrosion resistant materials, including Acrylic, Polysulfone, PVC-U and Glass. The range includes both in-line flowmeters and panel mount flowmeters.



- ✓ **Materials for most media: PVC-U, Acrylic, Polysulfone and glass**
- ✓ **Float manufactured from PVC-U, Stainless Steel Hastelloy C, PTFE, Sapphire, Carboloy or K Monel**
- ✓ **Piping connections to Plastic and Metal Pipe Systems**
- ✓ **High Level of Clarity with glass-like finish**
- ✓ **Wide Choice of optional scales**

Blue-White Flowmeter Programme Overview

Model	Material	Flow Range Liquid	Air	In-Line Mount	Panel Mount	Connection Size							
						1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	2"
F-400N	Acrylic	0.025 to 20 GPM	0.75 to 45 SCFM	●			●	●	●	●	●		
F-420N	Acrylic	5 to 50 GPM	-	●				●	●			●	
F-430N	Acrylic	4 to 100 GPM	-	●								●	●
F-460	Polysulfone	0.1 to 5 GPM	-	●					●	●			
F-461	Polysulfone	1 to 20 GPM	-	●							●		
F-462	Polysulfone	2 to 80 GPM	-	●									●
F-440	Polysulfone	0.025 to 10 GPM	1 to 48 SCFM	●	●			●	●				
F-450N	Polysulfone	0.1 to 10 GPM	8 to 80 SCFM	●	●			●	●	●			
F-451N	Polysulfone	0.5 to 40 GPM	4 to 230 SCFM	●							●	●	
F-452	Polysulfone	2.0 to 175 GPM	4 to 45 SCFM	●									●
F-550	Acrylic	0.025 to 20 GPM	0.1 to 45 SCFM		●			●	●	●	●		
F-500E	Acrylic	0.2 to 72 GPM	1 to 5 SCFM		●	●		●					
F-650	Glass	0.0001 to 29.72 GPM	0.7 to 59494 CC/min		●			●					
F-670	Glass	0.5 to 5 GPM	-	●				●	●				
F-750	PVC-U	0.2 to 32 GPM	0.1 to 3 SCFM		●			●					

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Blue-White F-400N Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 65°C
Accuracy: ±5% full scale
Scaling: US GPM plus L/min
Body Material: Machined Acrylic
End Connections: Polypropylene reinforced with aluminium stress rings
 Female NPT Threaded
Float: PVC-U, 316 St/St or Hastelloy C
O-Rings: FPM
Max Pressure Drop: 2 psi
Options: High/Low level alarm
Features: Back reflector for easy meter reading



Standard Flowmeter

Flow Range l/min	Flow Range US GPM	Connection FPT	PVC-U Float		Stainless Steel Float		Hastelloy C Float	
			Code	Price	Code	Price	Code	Price
0.1-1	0.025-0.250	1/4"	F-40 250 LN-4	133.70	-	-	F-40 250 LK-4	288.97
0.1-1	0.025-0.250	3/8"	F-40 250 LN-6	133.70	-	-	F-40 250 LK-6	288.97
0.4-4	0.1-1.0	3/8"	F-40 375 LN-6	114.35	-	-	F-40 375 LK-6	158.53
0.4-4	0.1-1.0	1/2"	F-40 375 LN-8	114.35	-	-	F-40 375 LK-8	158.53
1.0-7.5	0.2-2.0	3/8"	-	-	F-40 376 LN-6	114.35	F-40 376 LK-6	158.53
1.0-7.5	0.2-2.0	1/2"	-	-	F-40 376 LN-8	114.35	F-40 376 LK-8	158.53
1.5-11	0.3-3.0	3/8"	-	-	F-40 377 LN-6	123.27	F-40 377 LK-6	288.97
1.5-11	0.3-3.0	1/2"	-	-	F-40 377 LN-8	123.27	F-40 377 LK-8	288.97
2.0-20	0.5-5.0	3/8"	-	-	F-40 500 LN-6	144.35	F-40 500 LK-6	288.97
2.0-20	0.5-5.0	1/2"	-	-	F-40 500 LN-8	114.35	F-40 500 LK-8	288.97
4.0-38	1.0-10	3/4"	-	-	F-40 750 LN-12	220.27	F-40 750 LK-12	315.82
4.0-38	1.0-10	1"	-	-	F-40 750 LN-16	220.27	F-40 750 LK-16	315.82
4.0-64	1.0-17	3/4"	-	-	F-41 017 LN-12	220.27	F-41 017 LK-12	315.82
4.0-64	1.0-17	1"	-	-	F-41 017 LN-16	220.27	F-41 017 LK-16	315.82
8.0-80	2.0-20	3/4"	-	-	F-41 000 LN-12	220.27	F-41 000 LK-12	315.82
8.0-80	2.0-20	1"	-	-	F-41 000 LN-16	220.27	F-41 000 LK-16	315.82

Flowmeter with High/Low Level Alarm

Flow Range l/min	Flow Range US GPM	Connection FPT	PVC-U Float		Stainless Steel Float		Hastelloy C Float	
			Code	Price	Code	Price	Code	Price
1.0-8	0.2-2.0	3/4"	FA-41 376 LN-12	470.38	-	-	-	-
2.0-20	0.5-5.0	3/4"	FA-41 500 LN-12	470.38	-	-	-	-
2.0-20	0.5-5.0	1"	FA-41 500 LN-16	470.38	-	-	-	-
8.0-80	2.0-20	3/4"	-	-	FA-41 000 LN-12	483.51	-	-
8.0-80	2.0-20	1"	-	-	FA-41 000 LN-16	483.51	-	-

Flowmeter for Air

Flow Range SCFM	Connection FPT	Stainless Steel Float		Stainless Steel Float		Hastelloy C Float	
		Code	Price	Code	Price	Code	Price
0.75-7.5	3/8"	-	-	F-40 376 GN-6	113.01	-	-
0.75-7.5	1/2"	-	-	F-40 376 GN-8	113.01	-	-
4.0-45	3/4"	-	-	F-40 750 GN-12	220.27	-	-
4.0-45	1"	-	-	F-40 750 GN-16	220.27	-	-

Options and Spares:

	Code	Price
1/4" Female NPT Adaptor	F-4019	34.89
3/8" Female NPT Adaptor	F-4001NS	34.89
1/2" Female NPT Adaptor	F-4003NS	34.89
3/4" Female NPT Adaptor	F-4009	57.72
1" Female NPT Adaptor	F-4011	57.72
316 St/St Guidewire for F-40250LN and F-40500LN	F-4004	24.61
316 St/St Guidewire for F-40750LN and F-41017LN	F-4012	18.37
FPM O-Ring for 1/4", 3/8" and 1/2" connectors	90003-119	7.56
FPM O-Ring for 3/4", 1" connectors	F-4010K	9.44

Blue-White F-420N Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 54°C
Accuracy: ±5% full scale
Scaling: US GPM plus L/min
Body Material: Machined Acrylic
End Connections: PVC-U Male NPT Threaded
Float: 316 St/St
O-Rings: FPM
Features: Back reflector for easy meter reading



Standard Flowmeter

Flow Range l/min	Flow Range US GPM	Connection MPT	Stainless Steel Float	
			Code	Price
20-100	5-25	1 1/2"	F-40 25LN	319.47
30-150	8-40	1 1/2"	F-40 40LN	319.47
40-180	10-50	1 1/2"	F-40 50LN	319.47

Options and Spares:

	Code	Price
1 1/2" Male NPT Adaptor	76001-026	57.72
316 St/St Guidewire	76001-038	17.68
FPM O-Ring for 1 1/2" Male NPT Adaptor	2-127V	13.34
Wire Holder Polysulfone	91001-159	25.91

Blue-White F-430N Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 54°C
Accuracy: ±5% full scale
Scaling: US GPM plus L/min
Body Material: Cast Acrylic
End Connections: PVC-U reinforced with aluminium stress rings. Female NPT Threaded (Optional PVC-C or PP)
Float: 316 St/St
O-Rings: FPM
Features: Back reflector for easy meter reading
 Rod guided float



Standard Flowmeter

Flow Range l/min	Flow Range US GPM	Connection FPT	Stainless Steel Float	
			Code	Price
15-150	4-40	1 1/2"	F-43 040LNS	826.59
20-230	6-60	1 1/2"	F-43 060LNS	826.59
30-300	8-80	1 1/2"	F-43 080LNS	826.59
75-375	20-100	1 1/2"	F-43 100LNS	826.59
15-150	4-40	2"	F-43 040LNS-24	826.59
20-230	6-60	2"	F-43 060LNS-24	826.59
30-300	8-80	2"	F-43 080LNS-24	826.59
75-375	20-100	2"	F-43 100LNS-24	826.59

Options and Spares:

	Code	Price
2" PVC-U Female NPT Adaptor	76001-216	73.48
1 1/2" PVC-U Female NPT Adaptor	76001-226	73.48
FPM O-Ring Adaptor Seals	90003-118	14.33
Guide Rod 316 St/St	76001-229	89.10
Guide Rod Holder Polysulfone	91001-198	16.54

Blue-White F-460 and F-461 Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVDF: 98°C; PVC-U: 54°C
Accuracy: ±2.5% full scale
Scaling: US GPM plus L/min
Body Material: Natural Polysulfone
End Connections: PVDF or PVC-U Union Socket. Female NPT Threaded. Anodized Aluminium Nut (Optional PVC-U)
Float: PTFE
O-Rings: FPM
Max Pressure Drop: 2 psi



F-460 Standard Flowmeter

Flow Range l/min	Flow Range US GPM	Connection FPT	PVC-U Connections		PVDF Connections	
			Code	Price	Code	Price
0.4-4.4	0.1-1.2	1/2"	F-46 010 LX-08P	290.11	F-46 010 LX-08K	344.51
0.4-4.4	0.1-1.2	3/4"	F-46 010 LX-12P	290.11	F-46 010 LX-12K	344.51
0.8-8.0	0.2-2.0	1/2"	F-46 020 LX-08P	290.11	F-46 020 LX-08K	344.51
0.8-8.0	0.2-2.0	3/4"	F-46 020 LX-12P	290.11	F-46 020 LX-12K	344.51
1.0-11.0	0.3-3.0	1/2"	F-46 030 LX-08P	308.96	F-46 030 LX-08K	362.64
1.0-11.0	0.3-3.0	3/4"	F-46 030 LX-12P	308.96	F-46 030 LX-12K	362.64
2.0-20	0.5-5.0	1/2"	F-46 050 LX-08P	326.37	F-46 050 LX-08K	380.76
2.0-20	0.5-5.0	3/4"	F-46 050 LX-12P	326.37	F-46 050 LX-12K	380.76

F-461 Standard Flowmeter

Flow Range l/min	Flow Range US GPM	Connection FPT	PVC-U Connections		PVDF Connections	
			Code	Price	Code	Price
4.0-40.0	1.0-10.0	1"	F-46 1100 LX-16P	471.37	F-46 1100 LX-16K	539.44
5.0-75.0	2.0-20.0	1"	F-46 1200 LX-16P	471.37	F-46 1200 LX-16K	539.44

Options and Spares:

	Code	Price
1/2" PVDF Female NPT Adaptor	76001-004	101.06
3/4" PVDF Female NPT Adaptor	76000-982	101.06
1/2" PVC-U Female NPT Adaptor	76001-037	46.46
3/4" PVC-U Female NPT Adaptor	76001-042	46.46
Anodized Aluminium Union Nut	76000-980	47.37
FPM O-Ring for 1/2" and 3/4" Adaptors	F-45006V	5.64
Float Stop	91001-146	3.98

Blue-White F-462 Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 93°C
Accuracy: ±2.5% full scale
Scaling: US GPM plus L/min
Body Material: Natural Polysulfone
End Connections: Polysulfone NPT Female Threaded. PVDF or Polypropylene Inch Fusion Socket. PVDF or Polypropylene MM Fusion Socket.
Float: PTFE
O-Rings: FPM
Max Pressure Drop: 2 psi
Options: Can be ordered with Polycarbonate safety shield



Standard Flowmeter - Polysulfone Connections

Flow Range l/min	Flow Range US GPM	Connection FPT	Polysulfone Connections	
			Code	Price
8-80	2-20	2"	F-46 2200 LX-32H	822.08
20-200	5-50	2"	F-46 2500 LX-32H	822.08
30-300	8-80	2"	F-46 2800 LX-32H	822.08

Standard Flowmeter - Inch Fusion Socket Connections

Flow Range l/min	Flow Range US GPM	Connection Fusion Sock	Polypropylene Connections		PVDF Connections	
			Code	Price	Code	Price
8-80	2-20	2"	F-46 2200 LX-33G	939.53	F-46 2200 LX-33K	1526.72
20-200	5-50	2"	F-46 2500 LX-33G	939.53	F-46 2500 LX-33K	1526.72
30-300	8-80	2"	F-46 2800 LX-33G	939.53	F-46 2800 LX-33K	1526.72

Standard Flowmeter - MM Fusion Socket Connections

Flow Range l/min	Flow Range US GPM	Connection Fusion Sock	Polypropylene Connections		PVDF Connections	
			Code	Price	Code	Price
8-80	2-20	63mm	F-46 2200 LX-34G	939.53	F-46 2200 LX-34K	1526.72
20-200	5-50	63mm	F-46 2500 LX-34G	939.53	F-46 2500 LX-34K	1526.72
30-300	8-80	63mm	F-46 2800 LX-34G	939.53	F-46 2800 LX-34K	1526.72



Flowmeter with polycarbonate shield

Options and Spares:

	Code	Price
2" Polysulfone Female NPT Adaptor	F-452330N	125.01
2" Polypropylene Socket Fusion Adaptor	76001-294	216.67
2" PVDF Socket Fusion Adaptor	76001-295	489.75
63mm Polypropylene Socket Fusion Adaptor	76001-309	216.67
63mm PVDF Socket Fusion Adaptor	76001-310	491.01
FPM O-Ring	F-452043N	38.00
Union Nut	F-452004N	65.02
Float Stop	F-452002	16.38

Blue-White F-440N Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 100°C
Accuracy: ±5% full scale **Scaling:** US GPM plus L/min or US GPH
Body Material: Natural Polysulfone
End Connections: Grey Polysulfone Male NPT Threaded
Float: 316 St/St, Hastelloy C, PTFE or PVC-U **O-Rings:** FPM
Max Pressure Drop: 2 psi
Options: Configurations for both In-Line or Panel Mount.
 Optional Integral Flow Adjustment Valve



Standard Flowmeter - GPM and L/min Scales

Flow Range l/min	Flow Range US GPM	Connection MPT	LH Model		LHE Model		LEA Model	
			Code	Price	Code	Price	Code	Price
0.1-1	0.025-0.250	3/8"	F-44 250 LH-6	107.70	F-44 250 LHE-6	129.51	F-44 250 LEA-6	192.25
0.1-1	0.025-0.250	1/2"	F-44 250 LH-8	107.70	F-44 250 LHE-8	129.51	F-44 250 LEA-8	192.25
0.4-4	0.1-1.0	3/8"	F-44 375 LH-6	107.70	F-44 375 LHE-6	129.51	F-44 375 LEA-6	192.25
0.4-4	0.1-1.0	1/2"	F-44 375 LH-8	107.70	F-44 375 LHE-8	129.51	F-44 375 LEA-8	192.25
0.75-7.5	0.2-2.0	3/8"	F-44 376 LH-6	107.70	F-44 376 LHE-6	129.51	F-44 376 LEA-6	192.25
0.75-7.5	0.2-2.0	1/2"	F-44 376 LH-8	107.70	F-44 376 LHE-8	129.51	F-44 376 LEA-8	192.25
1.8-18	0.5-5.0	3/8"	F-44 500 LH-6	107.70	F-44 500 LHE-6	129.51	F-44 500 LEA-6	192.25
1.8-18	0.5-5.0	1/2"	F-44 500 LH-8	107.70	F-44 500 LHE-8	129.51	F-44 500 LEA-8	192.25
5.0-37.5	1.0-10.0	3/4"	F-44 750 LH-12	120.67	F-44 750 LHE-12	151.35	F-44 750 LEA-12	241.10

Flow Range l/min	Flow Range US GPM	Connection MPT	LHK Model		LKEA Model		LHB Model	
			Code	Price	Code	Price	Code	Price
0.1-1	0.025-0.250	3/8"	F-44 250 LHK-6	133.24	F-44 250 LKEA-6	249.83	-	-
0.1-1	0.025-0.250	1/2"	F-44 250 LHK-8	133.24	F-44 250 LKEA-8	249.83	F-44 250 LHB-8	131.16
0.4-4	0.1-1.0	3/8"	F-44 375 LHK-6	133.24	F-44 375 LKEA-6	249.83	-	-
0.4-4	0.1-1.0	1/2"	F-44 375 LHK-8	133.24	F-44 375 LKEA-8	249.83	F-44 375 LHB-8	131.16
0.75-7.5	0.2-2.0	3/8"	F-44 376 LHK-6	191.72	F-44 376 LKEA-6	299.36	-	-
0.75-7.5	0.2-2.0	1/2"	F-44 376 LHK-8	191.72	F-44 376 LKEA-8	299.36	F-44 376 LHB-8	131.16
1.8-18	0.5-5.0	3/8"	F-44 500 LHK-6	191.72	F-44 500 LKEA-6	299.36	-	-
1.8-18	0.5-5.0	1/2"	F-44 500 LHK-8	191.72	F-44 500 LKEA-8	299.36	F-44 500 LHB-8	131.16
5.0-37.5	1.0-10.0	3/4"	F-44 750 LHK-12	287.56	F-44 750 LKEA-12	405.16	F-44 750 LHB-12	151.67

Standard Flowmeter - GPH Scale

Flow Range US GPH	Connection MPT	LH Model		LHE Model		LEA Model	
		Code	Price	Code	Price	Code	Price
3.0-30	3/8"	F-44 330 LH-6	107.70	F-44 330 LHE-6	129.51	F-44 330 LEA-6	192.25
3.0-30	1/2"	F-44 330 LH-8	107.70	F-44 330 LHE-8	129.51	F-44 330 LEA-8	192.25
5.0-60	3/8"	F-44 560 LH-6	107.70	F-44 560 LHE-6	129.51	F-44 560 LEA-6	192.25
5.0-60	1/2"	F-44 560 LH-8	107.70	F-44 560 LHE-8	129.51	F-44 560 LEA-8	192.25

Flow Range US GPH	Connection MPT	LHK Model		LHE Model		LHB Model	
		Code	Price	Code	Price	Code	Price
3.0-30	3/8"	F-44 330 LHK-6	191.72	F-44 330 LKEA-6	299.36	-	-
3.0-30	1/2"	F-44 330 LHK-8	191.72	F-44 330 LKEA-8	299.36	F-44 330 LHB-8	131.16
5.0-60	3/8"	F-44 560 LHK-6	191.72	F-44 560 LKEA-6	299.36	-	-
5.0-60	1/2"	F-44 560 LHK-8	191.72	F-44 560 LKEA-8	299.36	F-44 560 LHB-8	131.16

Model Variations:

LH Straight In-Line Flowmeter
LHE 90° Elbows Flowmeter for Panel Mount Installation
LEA 90° Elbows Flowmeter with Adjustable Valve for Panel Mount Installation
LHK Straight In-Line Flowmeter with Hastelloy C, PVC-U or PTFE Float and Guide Rod
LKEA 90° Elbows Flowmeter for Panel Mount Installation with Hastelloy C, PVC-U or PTFE Float and Guide Rod
LHB Straight In-Line Flowmeter with Brass Adaptors

Options and Spares:

	Code	Price
3/8" Male NPT Adaptor	F-4407*	17.52
3/8" Male NPT 90° Elbow for Panel Mount	F4440K*	22.73
1/2" Male NPT Adaptor	F-4408*	17.52
1/2" Male NPT 90° Elbow for Panel Mount	F-4420P*	22.73
3/4" Male NPT Adaptor	F4409*	21.82
3/4" Male NPT 90° Elbow for Panel Mount	F-4421K*	26.24
Half Union Connector for all F-440 (except F-44750)	F-4405P	20.82
Half Union Connector for all F-44750	F-4406P	23.84
Panel Mount Lock Nut for 3/8" and 1/2" Adaptors	F-4427A	3.49
Panel Mount Lock Nut for 3/4" Adaptors	F-4428A	4.68
FPM O-Ring for 3/8" and 1/2" Adaptors	F-4410V	4.87
FPM O-Ring for 3/4" Adaptors	F-4411V	6.07

*Note: This part requires an O-Ring

variable area flowmeters

Blue-White F-450N Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 100°C
Accuracy: ±5% full scale **Scaling:** US GPM plus L/min or SCFM for Air
Body Material: Natural Polysulfone
End Connections: Grey Polysulfone Male NPT Threaded
Float: 316 St/St, Hastelloy C or PTFE **O-Rings:** FPM
Max Pressure Drop: 2 psi
Options: Configurations for both In-Line or Panel Mount.
 Optional Integral Flow Adjustment Valve



Standard Flowmeter - GPM and L/min Scales

Flow Range l/min	Flow Range US GPM	Connection Threaded	LHN Model		LHNE Model		LEA Model	
			Code	Price	Code	Price	Code	Price
0.4-4.0	0.1-1.0	3/8" FPT	F-45 375 LHN-6	113.36	F-45 375 LHNE-6	135.02	F-45 375 LEA-6	197.08
0.4-4.0	0.1-1.0	1/2" MPT	F-45 375 LHN-8	113.36	F-45 375 LHNE-8	135.02	F-45 375 LEA-8	197.08
1.0-7.5	0.2-2.0	3/8" FPT	F-45 376 LHN-6	113.36	F-45 376 LHNE-6	135.02	F-45 376 LEA-6	197.08
1.0-7.5	0.2-2.0	1/2" MPT	F-45 376 LHN-8	113.36	F-45 376 LHNE-8	135.02	F-45 376 LEA-8	197.08
2.0-20.0	0.5-5.0	3/8" FPT	F-45 500 LHN-6	113.36	F-45 500 LHNE-6	135.02	F-45 500 LEA-6	197.08
2.0-20.0	0.5-5.0	1/2" MPT	F-45 500 LHN-8	113.36	F-45 500 LHNE-8	135.02	F-45 500 LEA-8	197.08
2.0-20.0	0.5-5.0	3/4" MPT	F-45 500 LHN-12	113.36	F-45 500 LHNE-12	135.02	F-45 500 LEA-12	197.08
4.0-40.0	1.0-10.0	3/4" MPT	F-45 750 LHN-12	130.90	F-45 750 LHNE-12	151.88	F-45 750 LEA-12	213.97

Flow Range l/min	Flow Range US GPM	Connection Threaded	LHKN Model		LKEA Model		LHBN Model	
			Code	Price	Code	Price	Code	Price
0.4-4.0	0.1-1.0	3/8" FPT	F-45 375 LHKN-6	191.72	F-45 375 LKEA-6	309.30	-	-
0.4-4.0	0.1-1.0	1/2" MPT	F-45 375 LHKN-8	191.72	F-45 375 LKEA-8	309.30	F-45 375 LHBN-8	153.11
1.0-7.5	0.2-2.0	3/8" FPT	F-45 376 LHKN-6	191.72	F-45 376 LKEA-6	309.30	-	-
1.0-7.5	0.2-2.0	1/2" MPT	F-45 376 LHKN-8	191.72	F-45 376 LKEA-8	309.30	F-45 376 LHBN-8	153.11
2.0-20.0	0.5-5.0	3/8" FPT	F-45 500 LHKN-6	191.72	F-45 500 LKEA-6	309.30	-	-
2.0-20.0	0.5-5.0	1/2" MPT	F-45 500 LHKN-8	191.72	F-45 500 LKEA-8	309.30	F-45 500 LHBN-8	153.11
2.0-20.0	0.5-5.0	3/4" MPT	F-45 500 LHKN-12	191.72	F-45 500 LKEA-12	309.30	-	-
4.0-40.0	1.0-10.0	3/4" MPT	F-45 750 LHKN-12	287.56	F-45 750 LKEA-12	405.16	F-45 750 LHBN-12	179.38

Standard Flowmeter - SCFM Scale for AIR

Flow Range SCFM	Connection Threaded	GHN Model		GHNE Model		GEA Model	
		Code	Price	Code	Price	Code	Price
1-12	3/8" FPT	F-45 376 GHN-6	113.36	F-45 376 GHNE-6	135.02	F-45 376 GEA-6	197.08
1-12	1/2" MPT	F-45 376 GHN-8	113.36	F-45 376 GHNE-8	135.02	F-45 376 GEA-8	197.08
4-48	3/4" MPT	F-45 750 GHN-12	130.90	F-45 750 GHNE-12	151.88	F-45 750 GEA-12	213.97

Model Variations:

LH	Straight In-Line Flowmeter
LHE	90° Elbows Flowmeter for Panel Mount Installation
LEA	90° Elbows Flowmeter with Adjustable Valve for Panel Mount Installation
LHKN	Straight In-Line Flowmeter with Hastelloy C, PVC-U or PTFE Float and Guide Rod
LKEA	90° Elbows Flowmeter for Panel Mount Installation with Hastelloy C, PVC-U or PTFE Float and Guide Rod
LHBN	Straight In-Line Flowmeter with Brass Adaptors
GHN	Straight In-Line Flowmeter Calibrated for Air
GHNE	90°C Elbows Flowmeter for Panel Mount Installation Calibrated for Air
GEA	90°C Elbows Flowmeter with Adjustable Valve for Panel Mount Installation Calibrated for Air

Options and Spares:

	Code	Price
3/8" Male NPT Adaptor	F-45011N*	17.52
3/8" Male NPT 90° Elbow for Panel Mount	F4441K*	26.24
1/2" Male NPT Adaptor	F-45013N*	17.52
1/2" Male NPT 90° Elbow for Panel Mount	F-4442K*	26.24
3/4" Male NPT Adaptor	F4409*	21.82
3/4" Male NPT 90° Elbow for Panel Mount	F-4421K*	26.24
Half Union Connector for all F-450	F-4406P	23.84
Lock Nut for 1/2" and 3/8" adaptors	F-4427A	3.49
Lock Nut for 3/4" adaptors	F-4428A	4.68
FPM O-Ring for all F-450	F-4411V	6.07
Wireholder for F-450N except F-45750N	F-45007	7.05
Wireholder for F-45750N	F-45019	8.76

*Note: This part requires an O-Ring

Blue-White F-451N Series High Volume Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 100°C
Accuracy: ±3% full scale **Scaling:** US GPM plus L/min or SCFM for Air
Body Material: Natural Polysulfone
End Connections: Grey Polysulfone Female NPT Threaded
Float: 316 St/St, Hastelloy C or PTFE **O-Rings:** FPM
Max Pressure Drop: 1 psi
Options: Configurations for both In-Line or Panel Mount.
 Can be ordered with Polycarbonate safety shield.



Elbow version with polycarbonate shield

Standard Flowmeter - GPM and L/min Scales

Flow Range l/min	Flow Range US GPM	Connection FPT	LHN Model		LHNE Model	
			Code	Price	Code	Price
2-20	0.5-6.0	1"	F-45 1006 LHN	349.00	F-45 1006 LHNE	430.05
2-20	0.5-6.0	1 1/2"	F-45 1006 LHN-24	390.72	-	-
4-40	1.0-10.0	1"	F-45 1001 LHN	371.47	F-45 1001 LHNE	430.05
4-40	1.0-10.0	1 1/2"	F-45 1001 LHN-24	390.72	-	-
7.5-75	2.0-20.0	1"	F-45 1002 LHN	389.88	F-45 1002 LHNE	446.76
7.5-75	2.0-20.0	1 1/2"	F-45 1002 LHN-24	409.10	-	-
12-115	3.0-30.0	1"	F-45 1003 LHN	427.19	F-45 1003 LHNE	480.68
12-115	3.0-30.0	1 1/2"	F-45 1003 LHN-24	446.41	-	-
15-155	4.0-40.0	1"	F-45 1004 LHN	448.43	F-45 1004 LHNE	499.90
15-155	4.0-40.0	1 1/2"	F-45 1004 LHN-24	467.66	-	-

Flow Range l/min	Flow Range US GPM	Connection FPT	LHNC Model		LHKN Model		LHBPN Model	
			Code	Price	Code	Price	Code	Price
2-20	0.5-6.0	1"	F-45 1006 LHNC	491.09	F-45 1006 LHKN	636.37	F-45 1006 LHBPN	504.16
2-20	0.5-6.0	1 1/2"	F-45 1006 LHNC-24	529.16	F-45 1006 LHKN-24	655.60	-	-
4-40	1.0-10.0	1"	F-45 1001 LHNC	509.93	F-45 1001 LHKN	636.37	F-45 1001 LHBPN	522.80
4-40	1.0-10.0	1 1/2"	F-45 1001 LHNC-24	529.16	F-45 1001 LHKN-24	655.60	-	-
7.5-75	2.0-20.0	1"	F-45 1002 LHNC	528.33	F-45 1002 LHKN	684.36	F-45 1002 LHBPN	565.32
7.5-75	2.0-20.0	1 1/2"	F-45 1002 LHNC-24	547.58	F-45 1002 LHKN-24	703.62	-	-
12-115	3.0-30.0	1"	F-45 1003 LHNC	565.67	F-45 1003 LHKN	733.48	F-45 1003 LHBPN	562.49
12-115	3.0-30.0	1 1/2"	F-45 1003 LHNC-24	584.90	F-45 1003 LHKN-24	752.74	-	-
15-155	4.0-40.0	1"	F-45 1004 LHNC	586.88	F-45 1004 LHKN	806.59	F-45 1004 LHBPN	590.43
15-155	4.0-40.0	1 1/2"	F-45 1004 LHNC-24	606.12	F-45 1004 LHKN-24	825.84	-	-

Standard Flowmeter - SCFM Scale for AIR

Flow Range SCFM	Connection FPT	GHN Model	
		Code	Price
8-80	1"	F-45 1002 GHN	389.88
8-80	1 1/2"	F-45 1002 GHN-24	409.10

Model Variations:

LHN Straight In-Line Flowmeter
LHNE 90° Elbows Flowmeter for Panel Mount Installation (MPT except for F-451006 which is FPT)
HNC Straight In-Line Flowmeter with Polycarbonate Shield
LHKN Straight In-Line Flowmeter with Hastelloy C or PTFE Float and Guide Rod
LHBPN Straight In-Line Flowmeter with Brass Adaptors
GHN Straight In-Line Flowmeter Calibrated for Air

Options and Spares:

	Code	Price
Union Nut	F-45038N	41.26
1" Polysulfone Female NPT Adaptor	F-45030N	58.05
1" Brass Female NPT Adaptor	F-45047N	128.60
1 1/2" Polysulfone Female NPT Adaptor	76000-967	58.05
1" Male NPT 90° Elbow for Panel Mount	F-45031	41.76
FPM O-Ring	2-136V	13.44
Wireholder for 0.5-6, 1-10, 2-20 GPM;		
8-80 SCFM	F-45025	8.67
Wireholder for 3-30, 4-40 GPM	F-45025-2	8.67

variable area flowmeters

Blue-White F-452 Series Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 9 bar
Maximum Fluid Temperature: 65°C
Accuracy: ±2% full scale **Scaling:** US GPM plus L/min or SCFM for Air
Body Material: Natural Polysulfone
End Connections: Grey Polysulfone Female NPT Threaded reinforced with aluminium stress rings
Float: 316 St/St, Hastelloy C or PTFE
O-Rings: FPM
Max Pressure Drop: 2 psi



Standard Flowmeter - GPM and L/min Scales

Flow Range l/min	Flow Range US GPM	Connection FPT	Stainless Steel Float		Hastelloy C or PTFE Float	
			Code	Price	Code	Price
8-78	2-20	2"	F-45 2020 LH	752.66	F-45 2020 LHK	1100.13
30-230	6-60	2"	F-45 2060 LH	752.66	F-45 2060 LHK	1143.93
40-300	10-80	2"	F-45 2080 LH	752.66	F-45 2080 LHK	1143.93
20-380	5-100	2"	F-45 2100 LH	752.66	F-45 2100 LHK	1143.93
60-500	15-130	2"	F-45 2130 LH	800.84	F-45 2130 LHK	1179.48
75-675	20-175	2"	F-45 2175 LH	800.84	F-45 2175 LHK	1179.48

Flow Range l/min	Flow Range US GPM	Connection FPT	Stainless Steel Float		Hastelloy C or PTFE Float	
			Code	Price	Code	Price
8-78	2-20	2"	F-45 2020 LHC	944.38	F-45 2020 LHKC	1291.84
30-230	6-60	2"	F-45 2060 LHC	944.38	F-45 2060 LHKC	1335.64
40-300	10-80	2"	F-45 2080 LHC	944.38	F-45 2080 LHKC	1335.64
20-380	5-100	2"	F-45 2100 LHC	944.38	F-45 2100 LHKC	1335.64
60-500	15-130	2"	F-45 2130 LHC	992.54	F-45 2130 LHKC	1371.19
75-675	20-175	2"	F-45 2175 LHC	992.54	F-45 2175 LHKC	1371.19

Model Variations:

- LH** Straight In-Line Flowmeter with 316 St/St Float
- LHK** 90° Elbows Flowmeter for Panel Mount Installation (MPT except for F-451006 which is FPT)
- LHC** Straight In-Line Flowmeter with Polycarbonate Shield
- LHKC** Straight In-Line Flowmeter with Hastelloy C or PTFE Float and Guide Rod
- GH** Straight In-Line Flowmeter with Brass Adaptors
- GHC** Straight In-Line Flowmeter Calibrated for Air

Standard Flowmeter - SCFM Scale for AIR

Flow Range SCFM	Connection FPT	Stainless Steel Float		Hastelloy C or PTFE Float	
		Code	Price	Code	Price
4-40	2"	F-45 2040 GH	752.66	F-45 2040 GHC	944.38
30-230	2"	F-45 2250 GH	752.66	F-45 2250 GHC	944.38

Options and Spares:

	Code	Price
Union Nut	F-452004	65.64
2" Polysulfone Female NPT Adaptor	F-452330	126.20
FPM O-Ring	F-452043	27.90
Wireholder	F-452002	16.38
St/St Guide Wire	F-452287	113.35
Float Stop	F-452332	1.12

Blue-White F-550 Panel Mount Flowmeter

Description: In-line variable area flowmeter for panel mounting

Mounting: Vertical - flow upwards

Maximum Fluid Pressure at 20°C: 17 bar

Maximum Fluid Temperature: 93°C

Accuracy: ±5% full scale **Scaling:** US GPM plus L/min

Body Material: Machined Acrylic

End Connections: Male NPT Threaded

Float: 316 Stainless Steel (PTFE on F-55005L)

O-Rings: FPM

Max Pressure Drop: 2 psi

Features: Bulkhead nuts attach directly to inside panel - mounting screws not required

Options: Optional Flow Adjustment Valve



Standard Flowmeter - GPM and L/min Scales

Flow Range l/min	Flow Range US GPM	Connection MPT	Standard Model		Model with Flow Valve	
			Code	Price	Code	Price
0.1-1	0.025-0.250	1/4"	F-55 250 L	153.35	F-55 250 LA	226.75
0.4-4	0.1-1.0	3/8"	F-55 375 L	148.87	F-55 375 LA	208.48
0.75-7.5	0.2-2.0	3/8"	F-55 376 L	148.87	F-55 376 LA	208.48
2-20	0.5-5.0	1/2"	F-55 500 L	148.87	F-55 500 LA	208.48
4-40	1-10	3/4"	F-55 750 L	176.55	F-55 750 LA	290.59
3-18	1-5	1"	F-55 005 L	210.25	-	
4-40	1-10	1"	F-55 010 L	210.25	F-55 010 LA	307.63
5-60	1-15	1"	F-55 015 L	210.25	F-55 015 LA	307.63
7.5-75	2-20	1"	F-55 200 L	210.25	F-55 200 LA	307.63

Standard Flowmeter - SCFM Scale for Air

Flow Range SCFM	Connection MPT	Standard Model		Model with Flow Valve	
		Code	Price	Code	Price
0.1-1.2	1/4"	F-55 250 G	153.35	F-55 250 GA	226.75
0.5-4.5	3/8"	F-55 375 G	148.87	F-55 375 GA	208.48
1-7	3/8"	F-55 376 G	148.87	F-55 376 GA	208.48
2-20	1/2"	F-55 500 G	148.87	F-55 500 GA	208.48
4-45	3/4"	F-55 750 G	176.55	F-55 750 GA	290.59

Options and Spares:

	Code	Price
Adaptor for F-55250	76001-079*	27.87
Adaptor for F-55375, F-55376	91001-141*	16.51
Adaptor for F-55500	91001-142*	16.51
Adaptor for F-55750	91001-143*	22.67
Adaptor for F-55200, F-55005, F55010, F-55015	91001-144*	32.02
Adaptor Adjustable Valve 1/4" MPT	76001-153*	3.11
Adaptor Adjustable Valve 3/8" MPT	91001-173*	17.90
Adaptor Adjustable Valve 1/2" MPT	91001-174*	17.90
Adaptor Adjustable Valve 3/4" MPT	91001-175*	24.34
Adaptor Adjustable Valve 1" MPT	91001-176*	34.72
O-Ring for Adaptor 1/4" (Adj. Model)	90003-034	3.42
O-Ring for Adaptor 3/8" and 1/2" (Adj. Model)	90003-081	5.31
O-Ring for Adaptor 3/4" (Adj. Model)	90003-110	9.43
O-Ring for Adaptor 1" (Adj. Model)	90003-082	5.81
Cap for F-55250	76001-080	13.28
Cap for F-55375, F-55376, F-55500	91001-032	15.14
Cap for F-55750	91001-033	17.65
Cap for F-55200, F-55005, F-55010, F-55015	91001-160	41.13
Panel Lock Nut 3/4" MPT	91001-171	4.72
Panel Lock Nut 1" MPT	91001-172	5.50
Panel Lock Nut 1/4" and 3/8" MPT	91001-153	3.11
Panel Lock Nut 1/2" MPT	91001-154	3.49
O-Ring for Adaptor 1/4" (Std. Model)	90003-072	5.04
O-Ring for Adaptor 3/8" and 1/2" (Std. Model)	90003-034	3.42
O-Ring for Adaptor 3/4" (Std. Model)	90003-081	5.31
O-Ring for Adaptor 1" (Std. Model)	90003-110	9.43

*Note: This part requires an O-Ring

Blue-White F-500E Series Panel Mount Flowmeter

Description: In-line variable area flowmeter for panel mounting

Mounting: Vertical - flow upwards

Maximum Fluid Pressure at 20°C: 10 bar

Maximum Fluid Temperature: 49°C

Accuracy: ±5% full scale **Scaling:** Various - see table

Body Material: Machined Acrylic

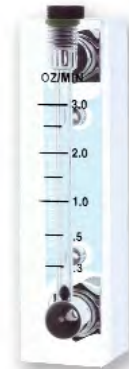
End Connections: 1/4" or 1/8" Male NPT Threaded

Float: 316 Stainless Steel or Glass

O-Rings: FPM

Max Pressure Drop: 2 psi

Features: A wide range of standard calibrations. High accuracy.



Standard Flowmeter - GPM and L/min Scales

Flow Range	Calibration	Connection MPT	Float Material	Code	Price
2-20	CFH	1/4"	Glass	F-501 E	78.58
4-30	CFH	1/4"	316 St/St	F-502 E	78.58
5-50	CFH	1/4"	316 St/St	F-503 E	78.58
2-24	LPM/Air	1/4"	316 St/St	F-504 E	78.58
1-11	GPH	1/4"	316 St/St	F-505 E	78.58
1-5	SCFM	1/4"	316 St/St	F-506 E	86.51
0.2-1.2	GPM	1/4"	316 St/St	F-507 E	86.51
12-72	GPH	1/4"	316 St/St	F-508 E	86.51
0.7-4.5	LPM	1/4"	316 St/St	F-509 E	86.51
60-300	CFH	1/4"	316 St/St	F-510 E	86.51
2-20	ML/min	1/8"	Glass	F-511 E	86.51
10-100	ML/min	1/8"	Glass	F-512 E	86.51
0.3-3.0	OZ/min	1/8"	Glass	F-513 E	86.51
4-40	OZ/hour	1/8"	Glass	F-514 E	86.51
2-20	OZ/min	1/8"	316 St/St	F-515 E	86.51

Options and Spares:

	Code	Price
Cap for F-501E, F-502E, F-511E, F-512E, F-513E, F514E	F-520*	10.28
Cap for F-503E, F-504E, F-505E	F-5008*	10.28
Cap for F-506E, F-507E, F-508E, F-0509E, F-510E	F-5016*	15.43
O-Ring for all F-500E Adaptors	90003-012	2.56
O-Ring for Cap on F-501E, F-502E, F-511E, F-512E, F-513E, F514E	C-602V	2.62
O-Ring for Cap on F-503E, F-504E, F-505E	C-502V	2.56
O-Ring for Cap on F-506E, F-507E, F-508E, F0509E, F-510E	S-0012-1V	4.81
Spring for all F-500E Units	F-528	2.74
Float Stop for F-506E, F-507E, F-508E, F-509E, F-510E	F-5036	2.08
Adaptor 1/8" Female NPT	76000-456*	31.94
Adaptor 1/4" Male NPT	76000-233*	25.71

*Note: This part requires an O-Ring

Blue-White F-650 Series Armoured Glass Tube Flowmeter

Description: In-line variable area flowmeter with armoured safety protection
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: 121°C
Accuracy: ±2% full scale **Scaling:** ML/min; L/hour; US GPH or Air CC/min
Tube Material: Heavy Wall Borosilicate Glass
Housing Material: Heavy Duty 316 Stainless Steel
Shield Material: Polycarbonate
End Connections: Stainless Steel 1/4" Female NPT Threaded
Float: 316 Stainless Steel, Sapphire, Carboloy or Glass
O-Rings: FPM
Max Pressure Drop: 2 psi
Option: Two standard lengths: 65mm and 150mm. Flow adjustment valve.



Standard Flowmeter - 65mm Scale

Calibration for Water (21°C)			Air (STP) CC/min	Float Material	Connec. FPT	Standard Model		Model with Flow Valve	
ML/min	L/hour	GPH				Code	Price	Code	Price
0.011-0.065	0.0003-0.0037	0.0001-0.001	0.7-5.8	Glass	1/4"	F-650 1G-4X	431.61	F-650 1G-4A	483.39
0.015-0.084	0.0007-0.0037	0.0002-0.001	0.8-8.3	Sapphire	1/4"	F-650 1SA-4X	431.61	F-650 1SA-4A	483.39
0.015-0.283	0.0007-0.0151	0.0002-0.004	1.4-16.7	316 St/St	1/4"	F-650 1SS-4X	431.61	F-650 1SS-4A	483.39
0.024-0.615	0.001-0.340	0.0004-0.009	3.0-33.0	Carboloy	1/4"	F-650 1C-4X	507.17	F-650 1C-4A	560.13
0.9-39.7	0.037-2.384	0.01-0.63	52-2040	Glass	1/4"	F-650 3G-4X	431.61	F-650 3G-4A	483.39
0.6-61.0	0.034-3.671	0.009-0.97	56-2704	Sapphire	1/4"	F-650 3SA-4X	431.61	F-650 3SA-4A	483.39
1.0-108.3	0.059-6.472	0.0158-1.71	115-3990	316 St/St	1/4"	F-650 3SS-4X	431.61	F-650 3SS-4A	483.39
2.0-169.8	0.117-10.18	0.031-2.69	182-5739	Carboloy	1/4"	F-650 3C-4X	507.17	F-650 3C-4A	560.13
36-522	2.119-31.3	0.56-8.27	1852-23169	Glass	1/4"	F-650 2G-4X	431.61	F-650 2G-4A	483.39
58-798	3.444-47.88	0.91-12.65	2650-29218	Sapphire	1/4"	F-650 2SA-4X	431.61	F-650 2SA-4A	483.39
106-1261	6.320-75.58	1.67-19.97	3785-42094	315 St/St	1/4"	F-650 2SS-4X	431.61	F-650 2SS-4A	483.39
176-1866	10.522-111.9	2.78-29.58	6082-58500	Carboloy	1/4"	F-650 2C-4X	507.17	F-650 2C-4A	560.13

Standard Flowmeter - 150mm Scale

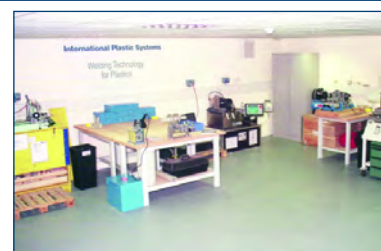
Calibration for Water (21°C)			Air (STP) CC/min	Float Material	Connec. FPT	Standard Model		Model with Flow Valve	
ML/min	L/hour	GPH				Code	Price	Code	Price
0.100-0.850	0.0059-0.049	0.00158-0.013	11.5-92.0	Glass	1/4"	F-655 1G-4X	559.95	F-655 1G-4A	607.12
0.21-1.92	0.012-0.130	0.0033-0.030	17-140	Sapphire	1/4"	F-655 1SA-4X	559.95	F-655 1SA-4A	607.12
0.28-4.74	0.0151-0.263	0.004-0.075	33-264	316 St/St	1/4"	F-655 1SS-4X	559.95	F-655 1SS-4A	607.12
1.10-8.50	0.064-0.510	0.017-0.135	58-454	Carboloy	1/4"	F-655 1C-4X	632.06	F-655 1C-4A	683.81
15-541	0.8971-32.3535	0.2370-8.5476	962-22536	Glass	1/4"	F-655 2G-4X	559.95	F-655 2G-4A	607.12
30-806	1.7941-48.2013	0.4740-12.7348	1389-29560	Sapphire	1/4"	F-655 2SA-4X	559.95	F-655 2SA-4A	607.12
57-1288	3.4088-77.0263	0.9006-20.3504	2397-41512316	St/St	1/4"	F-655 2SS-4X	559.95	F-655 2SS-4A	607.12
103-1881	6.1597-112.4895	1.6274-29.7188	3542-59494	Carboloy	1/4"	F-655 2C-4X	632.06	F-655 2C-4A	683.81

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Blue-White F-670N Series Glass Tube Flowmeter

Description: In-line variable area flowmeter
Mounting: Vertical - flow upwards
Maximum Fluid Pressure at 20°C: 10 bar
Maximum Fluid Temperature: PVDF: 98°C; PVC-U: 37°C
Accuracy: ±3% full scale **Scaling:** US GPM or L/min
Body Material: Borosilicate Glass
Shield Material: Polycarbonate
End Connections: PVDF, PVC-U or PVC-C Union NPT Female Threaded
Float: 316 Stainless Steel, Hastelloy C or PTFE **O-Rings:** FPM
Max Pressure Drop: 2 psi



Standard Flowmeter - Gallons Per Minute Scale

Flow Range US GPM	Connection FPT	PVC-U Connections Stainless Steel Float		PVC-U Connections Hastelloy C Float	
		Code	Price	Code	Price
0.1-1.0	3/8"	F-67 375L1 S-06 PV	558.45	F-67 375L1 K-06 PV	666.49
0.1-1.0	1/2"	F-67 375L1 S-08 PV	558.45	F-67 375L1 K-08 PV	666.49
0.2-2.0	3/8"	F-67 376L1 S-06 PV	558.45	F-67 376L1 K-06 PV	666.49
0.2-2.0	1/2"	F-67 376L1 S-08 PV	558.45	F-67 376L1 K-08 PV	666.49
0.5-5.0	3/8"	F-67 500L1 S-06 PV	558.45	F-67 500L1 K-06 PV	666.49
0.5-5.0	1/2"	F-67 500L1 S-08 PV	558.45	F-67 500L1 K-08 PV	666.49

Flow Range US GPM	Connection FPT	PVDF Connections Stainless Steel Float		PVDF Connections Hastelloy C Float	
		Code	Price	Code	Price
0.1-1.0	3/8"	F-67 375L1 S-06 KV	770.86	F-67 375L1 K-06 KV	878.88
0.1-1.0	1/2"	F-67 375L1 S-08 KV	770.86	F-67 375L1 K-08 KV	878.88
0.2-2.0	3/8"	F-67 376L1 S-06 KV	770.86	F-67 376L1 K-06 KV	878.88
0.2-2.0	1/2"	F-67 376L1 S-08 KV	770.86	F-67 376L1 K-08 KV	878.88
0.5-5.0	3/8"	F-67 500L1 S-06 KV	770.86	F-67 500L1 K-06 KV	878.88
0.5-5.0	1/2"	F-67 500L1 S-08 KV	770.86	F-67 500L1 K-08 KV	878.88

Standard Flowmeter - Litres Per Minute Scale

Flow Range L/min	Connection FPT	PVC-U Connections Stainless Steel Float		PVC-U Connections Hastelloy C Float	
		Code	Price	Code	Price
0.4-4.0	3/8"	F-67 375L2 S-06 PV	558.45	F-67 375L2 K-06 PV	666.49
0.4-4.0	1/2"	F-67 375L2 S-08 PV	558.45	F-67 375L2 K-08 PV	666.49
1.0-8.0	3/8"	F-67 376L2 S-06 PV	558.45	F-67 376L2 K-06 PV	666.49
1.0-8.0	1/2"	F-67 376L2 S-08 PV	558.45	F-67 376L2 K-08 PV	666.49
2.0-2	3/8"	F-67 500L2 S-06 PV	558.45	F-67 500L2 K-06 PV	666.49
2.0-20	1/2"	F-67 500L2 S-08 PV	558.45	F-67 500L2 K-08 PV	666.49

Flow Range L/min	Connection FPT	PVDF Connections Stainless Steel Float		PVDF Connections Hastelloy C Float	
		Code	Price	Code	Price
0.4-4.0	3/8"	F-67 375L2 S-06 KV	770.86	F-67 375L2 K-06 KV	878.88
0.4-4.0	1/2"	F-67 375L2 S-08 KV	770.86	F-67 375L2 K-08 KV	878.88
1.0-8.0	3/8"	F-67 376L2 S-06 KV	770.86	F-67 376L2 K-06 KV	878.88
1.0-8.0	1/2"	F-67 376L2 S-08 KV	770.86	F-67 376L2 K-08 KV	878.88
2.0-2	3/8"	F-67 500L2 S-06 KV	770.86	F-67 500L2 K-06 KV	878.88
2.0-20	1/2"	F-67 500L2 S-08 KV	770.86	F-67 500L2 K-08 KV	878.88

Options and Spares:

	Code	Price
PVC-U Union Nut	76001-112	79.73
Adaptor 1/2" PVC-U Out	76001-113	36.16
Adaptor 1/2" PVC-U In	76001-114	36.16
Adaptor 3/8" PVC-U Out	76001-136	36.16
Adaptor 3/8" PVC-U In	76001-137	36.16
Adaptor 1/2" PVDF Out	76001-140	167.53
Adaptor 1/2" PVDF In	76001-141	167.53
Adaptor 3/8" PVDF Out	76001-117	167.53
Adaptor 3/8" PVDF In	76001-118	167.53

Blue-White F-750 Series Panel Mount PVC-U Flowmeter

Description: In-line variable area flowmeter for panel mounting

Mounting: Vertical - flow upwards

Maximum Fluid Pressure at 20°C: 5 bar

Maximum Fluid Temperature: 37°C

Accuracy: ±10% full scale

Scaling: Liquid Flow: ML/min; L/hour; US GPH or Oz/min

Air Flow: SCFM; SCFH; or CC/min

Tube Material: Clear PVC-U

End Connections: For clamping to 1/4" PVC flexible tube

Float: 316 Stainless Steel, Glass, Ceramic, K Monel or PTFE

O-Rings: FPM

Max Pressure Drop: 2 psi

Option: Flow adjustment valve.



Standard Flowmeter - Liquid Flow

Calibration for Water (21°C)					Standard Model		Model with Flow Valve		
ML/min (XXX)	L/hour (XXX)	GPH (XXX)	Oz/min (XXX)	Float Material	Conneec.	Code	Price	Code	Price
10-100	-	0.2-1.6	0.25-3.5	PTFE	1/4"	F-750 -(XXX) T	44.47	F-750 -(XXX) TA	52.58
50-750	-	1.0-12	2-25	PTFE	1/4"	F-751 -(XXX) T	44.47	F-751 -(XXX) TA	52.58
10-150	-	0.2-2.3	0.50-5.0	Glass	1/4"	F-750 -(XXX) G	44.47	F-750 -(XXX) GA	52.58
-	0.10-1.0	1.0-16	2-34	Glass	1/4"	F-751 -(XXX) G	44.47	F-751 -(XXX) GA	52.58
20-200	-	0.3-3.1	0.50-6.5	Ceramic	1/4"	F-750 -(XXX) C	44.47	F-750 -(XXX) CA	52.58
-	0.05-1.5	2.0-24	5-50	Ceramic	1/4"	F-751 -(XXX) C	44.47	F-751 -(XXX) CA	52.58
50-350	-	0.5-5.5	2-12	316 St/St	1/4"	F-750 -(XXX) S	44.47	F-750 -(XXX) SA	52.58
-	0.20-2.0	3.0-32	7-70	316 St/St	1/4"	F-751 -(XXX) S	44.47	F-751 -(XXX) SA	52.58
-	0.20-2.0	3.0-32	7-70	K Monel	1/4"	F-751 -(XXX) K	44.47	F-751 -(XXX) KA	52.58

Note: To complete the code number, replace (XXX) with the flow range

Standard Flowmeter - Air

Calibration for Air			Standard Model		Model with Flow Valve			
SCFH (XXX)	SCFM (XXX)	CC/min (XXX)	Float Material	Conneec.	Code	Price	Code	Price
1.0-14	-	1000-6000	Glass	1/4"	F-750 -(XXX) G	44.47	F-750 -(XXX) GA	52.58
-	0.10-1.5	4000-40000	Glass	1/4"	F-751 -(XXX) G	44.47	F-751 -(XXX) GA	52.58
2.0-18	-	1000-8000	Ceramic	1/4"	F-750 -(XXX) C	44.47	F-750 -(XXX) CA	52.58
-	0.20-2.0	5000-55000	Ceramic	1/4"	F-751 -(XXX) C	44.47	F-751 -(XXX) CA	52.58
5.0-25	-	1000-12000	316 St/St	1/4"	F-750 -(XXX) S	44.47	F-750 -(XXX) SA	52.58
-	0.30-3.0	5000-95000	316 St/St	1/4"	F-751 -(XXX) S	44.47	F-751 -(XXX) SA	52.58
-	0.30-3.0	5000-95000	K Monel	1/4"	F-751 -(XXX) K	44.47	F-751 -(XXX) KA	52.58

Note: To complete the code number, replace (XXX) with the flow range

BW Digi-Meter F-1000

F-1000 Series paddle wheel flow meters provide the performance and features of electronic meters, without the need for an external electricity supply. A large range of installation tees and saddles enables the meter to be fitted on pipe sizes up to 12"/315mm.

Ideal for use with water and mildly corrosive liquids.



Main Features

- Factory calibrated
- 6 digit LCD, up to 4 decimal places.
- Display & update time: every 2 seconds
- Battery operated (2 batteries alkaline AAA)
- Suitable for outdoor installations
- Total reset function can be disabled
- Tamper proof
- Installs quickly on existing pipe
- Available sizes 1 1/2" - 12" / 20mm - 315mm
- Can be mounted horizontally or vertically
- Minimal maintenance required
- Custom calibration available

Three versions of this digital flowmeter are available:

F-1000RB

Rate of flow display

F-1000TB

Total flow display

F-1000RT

Rate & total display

Specifications

Accuracy: +/- 2% full scale
Repeatability: +/- 1% full scale
Display: 6-digit LCD, rate and total
Max pressure: (20bar) @ 20°C
Max fluid temp @ 0 psi: 60°C
Max ambient temperature: -10° to +43°C
Minimal pressure drop
Calibration units: LPM, m3/min, LPH

Materials:

Sensor body/paddle/axle: PVDF
Mounting tee: Polypropylene, PVCu
Mounting saddle: 1 1/2" to 3": PVDF, 6" to 10": PVC
Sensor O-Rings: Viton®
Power: Two AAA batteries (included)
Battery life: 1 year minimum
Enclosure: NEMA 4X, (IP56), ABS



BW
DIGI-METER

**BW Digi-Meter F-1000
Polypropylene Body Male BSP**

Pipe Size M/NPT	LPM Range	Rate Only Model Number	Total Only Model Number	Rate & Total Model Number
3/8"	3 to 30	RB-375MB1-LPM1	TB-375MB1-LPM1	RT-375MB1-LPM1
3/8"	1 to 10	RB-375MB1-LPM2	TB-375MB1-LPM2	RT-375MB1-LPM2
1/2"	7 to 70	RB-500MB1-LPM1	TB-500MB1-LPM1	RT-500MB1-LPM1
1/2"	2 to 20	RB-500MB1-LPM2	TB-500MB1-LPM2	RT-500MB1-LPM2
3/4"	11 to 110	RB-750MB1-LPM1	TB-750MB1-LPM1	RT-750MB1-LPM1
3/4"	3 to 30	RB-750MB1-LPM2	TB-750MB1-LPM2	RT-750MB1-LPM2
1"	20 to 200	RB-100MB1-LPM1	TB-100MB1-LPM1	RT-100MB1-LPM1
1"	7 to 70	RB-100MB1-LPM2	TB-100MB1-LPM2	RT-100MB1-LPM2
1 1/2"	15 to 150	RB-150MB1-LPM1	TB-150MB1-LPM1	RT-150MB1-LPM1
1 1/2"	25 to 250	RB-150MB1-LPM2	TB-150MB1-LPM2	RT-150MB1-LPM2
1 1/2"	40 to 400	RB-150MB1-LPM3	TB-150MB1-LPM3	RT-150MB1-LPM3
2"	15 to 150	RB-200MB1-LPM1	TB-200MB1-LPM1	RT-200MB1-LPM1
2"	25 to 250	RB-200MB1-LPM2	TB-200MB1-LPM2	RT-200MB1-LPM2
2"	40 to 400	RB-200MB1-LPM3	TB-200MB1-LPM3	RT-200MB1-LPM3
2"	70 to 700	RB-200MB1-LPM4	TB-200MB1-LPM4	RT-200MB1-LPM4

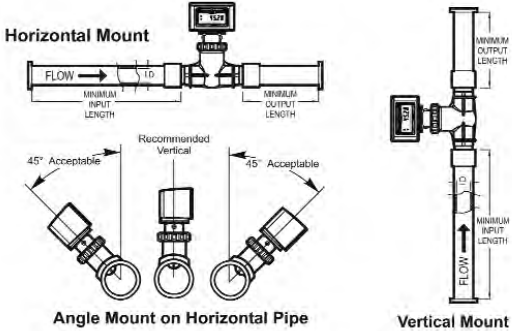


Installation Requirements:

Minimum Straight Pipe Length Requirements

The meter's accuracy is affected by disturbances such as pumps, elbows, tees, valves etc., in the flow stream. Install the meter in a straight run of pipe as far as possible from any disturbances. The distance required for accuracy will depend on the type of disturbance.

Type of Disturbance	Minimum Inlet Pipe Length	Minimum Outlet Pipe Length
Flange	10 x Pipe I.D.	5 x Pipe I.D.
Reducer	15 x Pipe I.D.	5 x Pipe I.D.
90° Elbow	20 x Pipe I.D.	5 x Pipe I.D.
Two Elbows - 1 Direction	25 x Pipe I.D.	5 x Pipe I.D.
Two Elbows - 2 Directions	40 x Pipe I.D.	5 x Pipe I.D.
Pump or Gate Valves	50 x Pipe I.D.	5 x Pipe I.D.



Mounting Location

- The meter is designed to withstand outdoor conditions. A cool, dry location, where the unit can be easily serviced is recommended.
- The meter can be mounted on horizontal or vertical runs of pipe. Mounting at the vertical (twelve o'clock) position on horizontal pipe is recommended. Mounting anywhere around the diameter of vertical pipe is acceptable, however, the pipe must be completely full of water at all times. Back pressure is essential on downward flows. See the minimum straight length of pipe requirement chart above.
- The meter can accurately measure flow from either direction.

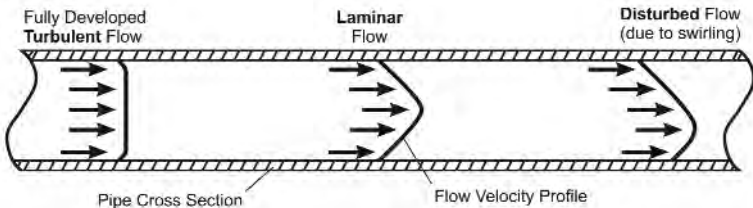
Flow Stream Requirements:

Measuring accuracy requires a fully developed *turbulent* flow profile. Pulsating, swirling and other disruptions in the flow stream will effect accuracy. Flow conditions with a *Reynolds Number* greater than 4000 will result in a fully developed *turbulent* flow. A Reynolds Number less than 2000 is *laminar* flow and may result in inaccurate readings.

REYNOLDS NUMBER EQUATION:

$$\text{REYNOLDS NUMBER} = \frac{3160 \times Q \times G}{D \times V}$$

- Where:
- Flow rate of the fluid in GPM = Q
 - Specific gravity of the fluid = G
 - Pipe inside diameter in inches = D
 - Fluid viscosity in centipoise = V



BW Digi-Meter F-1000 PVCu Tee Solvent Socket

Pipe Size	LPM Flow Range	Rate Only Model Number	Total Only Model Number	Rate & Total Model Number
1"	25 to 250	RB-100AT-LPM1	TB-100AT-LPM1	RT-100AT-LPM1
1 1/2"	60 to 600	RB-150AT-LPM1	TB-150AT-LPM1	RT-150AT-LPM1
2"	100 to 1000	RB-200AT-LPM1	TB-200AT-LPM1	RT-200AT-LPM1

LPM Models



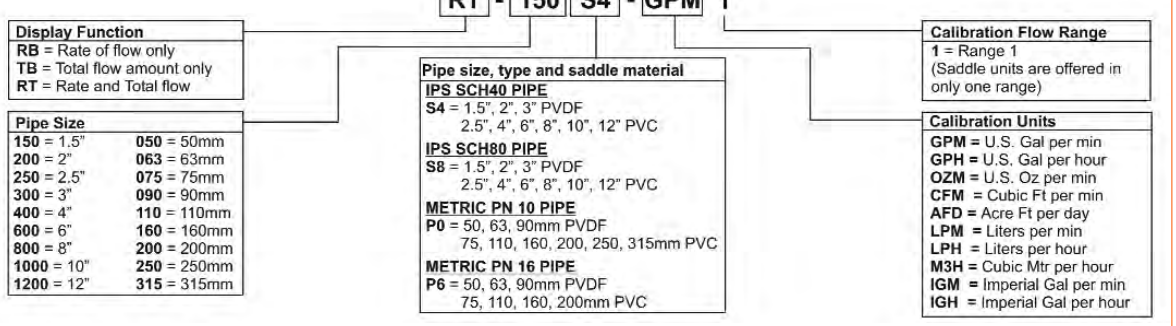
BW Digi-Meter F-1000 PVDF & PVCu Saddle



Pipe Size	LPM Flow Range	Rate Only Model Number	Total Only Model Number	Rate & Total Model Number
50mm	70 to 700	RB-050P0-LPM1	TB-050P0-LPM1	RT-050P0-LPM1
63mm	110 to 1100	RB-063P0-LPM1	TB-063P0-LPM1	RT-063P0-LPM1
75mm	150 to 1500	RB-075P0-LPM1	TB-075P0-LPM1	RT-075P0-LPM1
90mm	230 to 2300	RB-090P0-LPM1	TB-090P0-LPM1	RT-090P0-LPM1
110mm	350 to 3500	RB-110P0-LPM1	TB-110P0-LPM1	RT-110P0-LPM1
160mm	720 to 7200	RB-160P0-LPM1	TB-160P0-LPM1	RT-160P0-LPM1
200mm	1150 to 11500	RB-200P0-LPM1	TB-200P0-LPM1	RT-200P0-LPM1
250mm	1700 to 17000	RB-250P0-LPM1	TB-250P0-LPM1	RT-250P0-LPM1
315mm	2700 to 27000	RB-315P0-LPM1	TB-315P0-LPM1	RT-315P0-LPM1

Models for METRIC PN10 Pipe (DIN 8062) display in litres per minute

Model Number Matrix:



BW Digi-Meter F-2000

F-2000 Series electronic insertion style flowmeters, are well suited for monitoring flow in municipal water and wastewater applications.

The clamp on saddle fitting and insertion sensor is quickly installed on imperial pipe sizes from 1½" through 12" and metric pipe sizes from 50 mm through 315 mm. The electronic display and communication enclosure can be mounted directly to the sensor, or remotely mounted to a pipe or panel.

Standard models display flow rate and accumulated total flow, and include an NPN open collector output for communication with dataloggers, SCADA systems, and other external devices.



Main Features

- 8 digit LCD, up to 4 decimal places.
- Display & update time: every 2 seconds.
- AC/DC Transformer or battery operated (RT models only)
- Factory programmed with calibration certificate
- Field programmable via front panel touch pad.
- Front panel security lockout.
- Total reset function can be disabled.
- Tamper proof.
- Suitable for outdoor installations.
- Installs quickly on existing pipe.
- Available pipe sizes 1½" -12"/20mm - 315mm
- Can be mounted horizontally or vertically
- Minimal Maintenance Required

Four versions of this digital flowmeter are available:

RT

Rate & Totalizer. Transformer or battery operated

AQ

4-20mA, 0-10 VDC analogue output, Rate & Totalizer. Transformer operated

PC

Batch Processing, flow rate alarm, proportional chemical metering, flow rate & totalizer. Transformer operated.

AP

Anaologue output Batch Processing, flow rate alarm, proportional chemical metering, flow rate & totalizer. Transformer operated.

Specifications

Accuracy: +/-1% full scale
 Repeatability: +/- 1% full scale
 Display: 8-digit LCD, rate and total
 Signal Distance: AC sine wave sensor = 60m (200ft)
 Optional Hall effect sensor = 1.6km (1 mile)
 Max pressure: (20bar) @ 20°C
 Max fluid temp @ 0 psi : 60°C
 Max Ambient temperature: -10° to + 43°C
 Minimal pressure drop
 Calibration Units: LPM, m3/min, LPH

Materials:

Sensor body/paddle/axle: PVDF
 Mounting Tee: Polypropylene, PVCu
 Mounting saddle: 1½" to 3": PVDF, 6" to 10": PVC
 Sensor O-Rings: Viton®
 Power: AC/DC Transformer or battery operated (RT models only) -Two AAA batteries (included)
 Battery life: 1-year minimum
 Enclosure: NEMA 4X, (IP56), ABS



BW DIGI-METER®

BW Digi-Meter F-2000 Tee Fitting, remote mount display



Pipe Size M/NPT	LPM Flow Range	Rate & Total Display Model Number	Analog Output Model Number	Process Control Model Number
3/8"	3 to 30	RTP-238MB1-LM1	AOP-238MB1-LM1	PCP-238MB1-LM1
3/8"	1 to 10	RTP-238MB1-LM2	AOP-238MB1-LM2	PCP-238MB1-LM2
1/2"	7 to 70	RTP-250MB1-LM1	AOP-250MB1-LM1	PCP-250MB1-LM1
1/2"	2 to 20	RTP-250MB1-LM2	AOP-250MB1-LM2	PCP-250MB1-LM2
3/4"	11 to 110	RTP-275MB1-LM1	AOP-275MB1-LM1	PCP-275MB1-LM1
3/4"	3 to 30	RTP-275MB1-LM2	AOP-275MB1-LM2	PCP-275MB1-LM2
1"	20 to 200	RTP-210MB1-LM1	AOP-210MB1-LM1	PCP-210MB1-LM1
1"	7 to 70	RTP-210MB1-LM2	AOP-210MB1-LM2	PCP-210MB1-LM2
1 1/2"	15 to 150	RTP-215MB1-LM1	AOP-215MB1-LM1	PCP-215MB1-LM1
1 1/2"	25 to 250	RTP-215MB1-LM2	AOP-215MB1-LM2	PCP-215MB1-LM2
1 1/2"	40 to 400	RTP-215MB1-LM3	AOP-215MB1-LM3	PCP-215MB1-LM3
2"	15 to 150	RTP-220MB1-LM1	AOP-220MB1-LM1	PCP-220MB1-LM1
2"	25 to 250	RTP-220MB1-LM2	AOP-220MB1-LM2	PCP-220MB1-LM2
2"	40 to 400	RTP-220MB1-LM3	AOP-220MB1-LM3	PCP-220MB1-LM3
2"	70 to 700	RTP-220MB1-LM4	AOP-220MB1-LM4	PCP-220MB1-LM4

Display in litres per minute

Pipe Size M/NPT	IGM Flow Range	Rate & Total Display Model Number	Analog Output Model Number	Process Control Model Number
3/8"	0.8 to 8	RTP-238MB1-IM1	AOP-238MB1-IM1	PCP-238MB1-IM1
3/8"	0.4 to 4	RTP-238MB2-IM2	AOP-238MB2-IM2	PCP-238MB2-IM2
1/2"	2 to 20	RTP-250MB1-IM1	AOP-250MB1-IM1	PCP-250MB1-IM1
1/2"	0.5 to 5	RTP-250MB2-IM2	AOP-250MB2-IM2	PCP-250MB2-IM2
3/4"	3 to 30	RTP-275MB1-IM1	AOP-275MB1-IM1	PCP-275MB1-IM1
3/4"	0.8 to 8	RTP-275MB2-IM2	AOP-275MB2-IM2	PCP-275MB2-IM2
1"	5 to 50	RTP-210MB1-IM1	AOP-210MB1-IM1	PCP-210MB1-IM1
1"	2 to 20	RTP-210MB2-IM2	AOP-210MB2-IM2	PCP-210MB2-IM2
1 1/2"	4 to 40	RTP-215MB1-IM1	AOP-215MB1-IM1	PCP-215MB1-IM1
1 1/2"	6 to 60	RTP-215MB2-IM2	AOP-215MB2-IM2	PCP-215MB2-IM2
1 1/2"	10 to 100	RTP-215MB3-IM3	AOP-215MB3-IM3	PCP-215MB3-IM3
2"	4 to 40	RTP-220MB1-IM1	AOP-220MB1-IM1	PCP-220MB1-IM1
2"	6 to 60	RTP-220MB2-IM2	AOP-220MB2-IM2	PCP-220MB2-IM2
2"	10 to 100	RTP-220MB3-IM3	AOP-220MB3-IM3	PCP-220MB3-IM3
2"	20 to 200	RTP-220MB4-IM4	AOP-220MB4-IM4	PCP-220MB4-IM4

Display in imperial gallons per minute

Model Number Matrix:

RT P 2 50 MB1 GM 1

<p>Display Function</p> <p>RT = Rate and Total flow AO = Rate, Total, 4-20mA PC = Rate, Total, Relay AP = Rate, Total, 4-20mA, relay</p>	<p>Display Mount / Sensor Type</p> <p>S = Display mounted on AC coil sensor P = Display remote mount, AC coil sensor H = Display remote mount, Hall Effect sensor</p>	<p>Power</p> <p>B = Battery holder with 4 AA cells 1 = U.S. Transformer, AC 115V60Hz/15Vdc, NEMA5/15 plug 2 = Europe Transformer, AC 230V50Hz/15Vdc, CEE 7/11 plug 3 = U.S. Transformer, AC 230V60Hz/15Vdc, NEMA 5/15 plug 4 = U.S. Transformer, 115V60Hz and Battery back-up 5 = Europe Transformer, 230V50Hz and Battery back-up 6 = U.S. Transformer, 230V60Hz and Battery back-up X = No Selection (Customer must supply power)</p>	<p>Pipe Size</p> <p>38 = 3/8 inch 50 = 1/2 inch 75 = 3/4 inch 10 = 1 inch 15 = 1-1/2 inch 20 = 2 inch</p>	<p>Pipe Fitting type and Material</p> <p>MB1 = PP body British BSPT, range #1 MB2 = PP body British BSPT, range #2 MB3 = PP body British BSPT, range #3 MB4 = PP body British BSPT, range #4 FB1 = PVDF body British BSPT, range #1 FB2 = PVDF body British BSPT, range #2 FB3 = PVDF body British BSPT, range #3 FB4 = PVDF body British BSPT, range #4 M1 = PP body U.S. NPT, range #1 M2 = PP body U.S. NPT, range #2 M3 = PP body U.S. NPT, range #3 M4 = PP body U.S. NPT, range #4 F1 = PVDF body U.S. NPT, range #1 F2 = PVDF body U.S. NPT, range #2 F3 = PVDF body U.S. NPT, range #3 F4 = PVDF body U.S. NPT, range #4</p>	<p>Calibration Flow Range</p> <p>1 = Range 1 (see pipe data) 2 = Range 2 (see pipe data) 3 = Range 3 (see pipe data) 4 = Range 4 (see pipe data) 5 = Range 5 (see pipe data) 6 = Range 6 (see pipe data)</p>	<p>Calibration Units</p> <p>GM = U.S. Gal per min GH = U.S. Gal per hour OM = U.S. Oz per min FM = Cubic Ft per min AD = Acre Ft per day LM = Liters per min LH = Liters per hour MH = Cubic Mtr per hour IM = Imperial Gal per min IH = Imperial Gal per hour</p>
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BW Digi-Meter F-2000
Saddle Fitting, remote mount display



Pipe Size	LPM Flow Range	Rate & Total Model Number	Analog Output Model Number	Process Control Model Number
50mm	70 to 700	RTP-105K0-LM1	AOP-105K0-LM1	PCP-105K0-LM1
63mm	110 to 1100	RTP-106K0-LM1	AOP-106K0-LM1	PCP-106K0-LM1
75mm	150 to 1500	RTP-108A0-LM1	AOP-108A0-LM1	PCP-108A0-LM1
90mm	230 to 2300	RTP-109K0-LM1	AOP-109K0-LM1	PCP-109K0-LM1
110mm	350 to 3500	RTP-111A0-LM1	AOP-111A0-LM1	PCP-111A0-LM1
160mm	720 to 7200	RTP-116A0-LM1	AOP-116A0-LM1	PCP-116A0-LM1
200mm	1150 to 11500	RTP-120A0-LM1	AOP-120A0-LM1	PCP-120A0-LM1
250mm	1700 to 17000	RTP-125A0-LM1	AOP-125A0-LM1	PCP-125A0-LM1
315mm	2700 to 27000	RTP-131A0-LM1	AOP-131A0-LM1	PCP-131A0-LM1

Models for METRIC PN10 pipe (DIN 8062)

Pipe Size	GPM Flow Range	Rate & Total Model Number	Analog Output Model Number	Process Control Model Number
1 1/2"	15 to 150	RTP-115K4-GM1	AOP-115K4-GM1	PCP-115K4-GM1
2"	30 to 300	RTP-120K4-GM1	AOP-120K4-GM1	PCP-120K4-GM1
2 1/2"	40 to 400	RTP-125A4-GM1	AOP-125A4-GM1	PCP-125A4-GM1
3"	60 to 600	RTP-130K4-GM1	AOP-130K4-GM1	PCP-130K4-GM1
4"	100 to 1000	RTP-140A4-GM1	AOP-140A4-GM1	PCP-140A4-GM1
6"	250 to 2500	RTP-160A4-GM1	AOP-160A4-GM1	PCP-160A4-GM1
8"	400 to 4000	RTP-180A4-GM1	AOP-180A4-GM1	PCP-180A4-GM1
10"	600 to 6000	RTP-1100A4-GM1	AOP-1100A4-GM1	PCP-1100A4-GM1
12"	800 to 8000	RTP-1120A4-GM1	AOP-1120A4-GM1	PCP-1120A4-GM1

Models for U.S. IPS sch40 pipe (ASTM 1785)

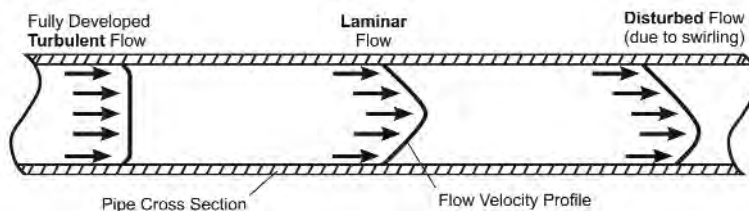
Flow Stream Requirements:

Measuring accuracy requires a fully developed *turbulent* flow profile. Pulsating, swirling and other disruptions in the flow stream will effect accuracy. Flow conditions with a *Reynolds Number* greater than 4000 will result in a fully developed *turbulent* flow. A Reynolds Number less than 2000 is *laminar* flow and may result in inaccurate readings.

$$\text{REYNOLDS NUMBER} = \frac{3160 \times Q \times G}{D \times V}$$

Where:

- Flow rate of the fluid in GPM = Q
- Specific gravity of the fluid = G
- Pipe inside diameter in inches = D
- Fluid viscosity in centipoise = V

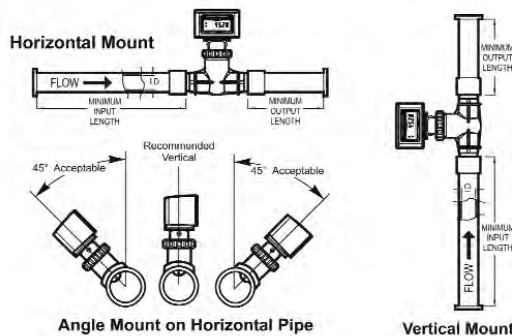


Installation Requirements:

Minimum Straight Pipe Length Requirements

The meter's accuracy is affected by disturbances such as pumps, elbows, tees, etc., in the flow stream. Install the meter in a straight run of pipe as far as possible from any disturbances. The distance required for accuracy will depend on the type of disturbance.

Type of Disturbance	Minimum Inlet Pipe Length	Minimum Outlet Pipe Length
Flange	10 x Pipe I.D.	5 x Pipe I.D.
Reducer	15 x Pipe I.D.	5 x Pipe I.D.
90° Elbow	20 x Pipe I.D.	5 x Pipe I.D.
Two Elbows - 1 Direction	25 x Pipe I.D.	5 x Pipe I.D.
Two Elbows - 2 Directions	40 x Pipe I.D.	5 x Pipe I.D.
Pump or Gate Valves	50 x Pipe I.D.	5 x Pipe I.D.



Mounting Location

- The meter is designed to withstand outdoor conditions. A cool, dry location, where the unit can be easily serviced is recommended.
- The meter can be mounted on horizontal or vertical runs of pipe. Mounting at the vertical (twelve o'clock) position on horizontal pipe is recommended. Mounting anywhere around the diameter of vertical pipe is acceptable, however, the pipe must be completely full of water at all times. Back pressure is essential on downward flows. See the minimum straight length of pipe requirement chart above.
- The meter can accurately measure flow from either direction.

flow x3 flow monitoring

The FlowX3 System includes a complete range of paddle wheel flow sensors, instruments and sensor installation fittings. Also included are insertion type electromagnetic flow transmitters. FlowX3 products provide high quality and state-of-the-art technology. All products are manufactured under ISO 9001:2000 and conform to the highest CE standards.

High Accuracy

± 0.75% of full scale with standard K factor
± 1% of reading value with field calibration

Excellent Low Flow Measurement

Accurately measures flow velocities down to 0.15m/s (0.5ft./sec.)

Large Flow Velocity Range

The frequency output is linearly proportional to flow rate from 0.15 to 8 m/s (0.5 to 25 ft./sec.).
Approximately 45 Hz/m/s.

Easily Installed into all types and sizes of piping

Sensor installation fittings are available in a large selection of types, materials and pipe sizes up to 24"/630mm.

Instruments

New design - More Outputs

Flow X3 instruments are supplied standard with a large offering of control outputs, including 4 to 20mA, open collector (pulse) and relay outputs. All have 3 line LCD displays and LED status indication for the control outputs.

Modular Design - 1/4 DIN Size

Only with Flow X3 can the same instrument be mounted in 3 different ways: directly to the flow sensor, or remotely in a panel or wall mounted.



Direct Mount



Panel Mount



Wall Mount

Sensors

Designed for Corrosive and "Dirty" Services

Flow X3 paddle wheel flow meters are of corrosion resistant solid plastic construction. They are recommended for services with up to 10% solids*. Bearings and sensor body near the rotor are designed to be self-cleaning and small magnets in the rotor blade lessen the chance of fouling due to accumulation of magnetic particules in the process.

Low Cost Blind Transmitters Available

Blind Transmitters are available with module directly mounted to the flow sensor. These are less expensive than the standard direct mount instrument/sensor packages.

Submersible Sensors Available

NEMA 6, 6P (IP68) models are available for outdoor or submersible installations.

*Particle size not exceeding 0.5mm cross section or length

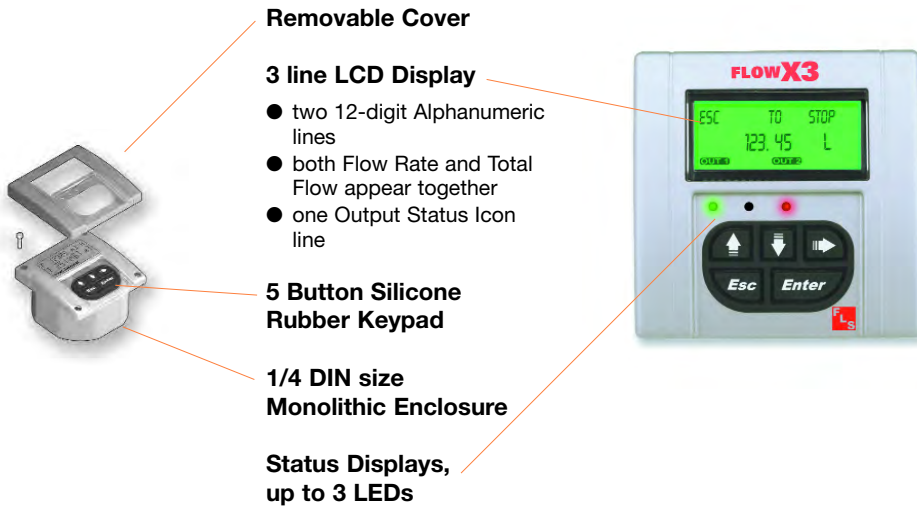


Designed for Heavy Duty Industrial Applications

Instruments have a NEMA 4, 4X monolithic clear polycarbonate enclosure in 1/4 DIN size, epoxy encapsulated electronics and a 5 button silicone rubber keypad.

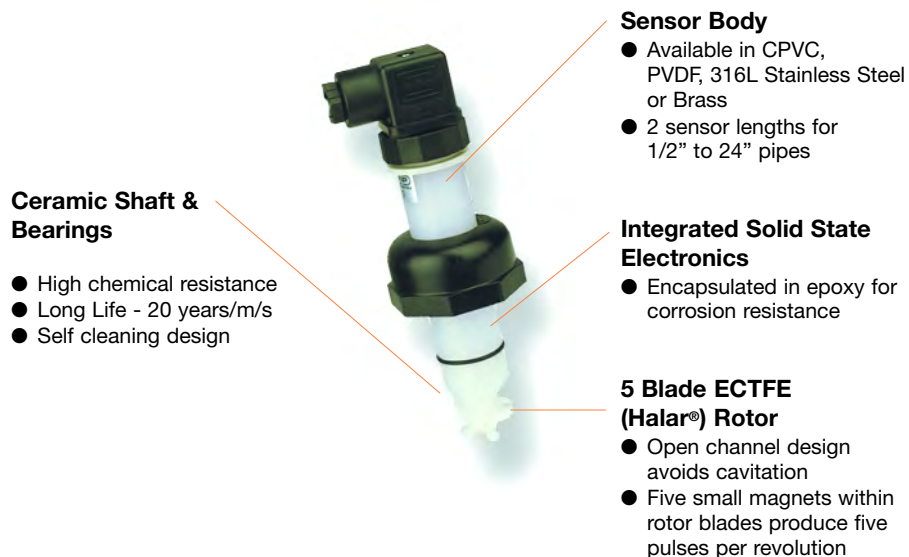
Easy Set-up

Setting up the instrument is easy using the keypad and self-explanatory menus. Plug-in terminals make instrument connection and removal easy. Auto calibration provides automatic calculation of K factors.



Long Service Life

Flow X3 have a *ceramic rotor shaft and bearings*. On aggressive chemicals and services containing grit, **FlowX3** sensors have outlasted other types with metal shafts and no bearings.



type F3.00 and F3.01 flow sensors

The Type F3.00/F3.01 Paddle Wheel Flow Sensors are designed for use with solid-free liquids. A square wave output signal is generated with frequency proportional to rate of rotor rotation and flow velocity. This pulse output is normally fed to a FlowX3 flow monitor/transmitter, blind transmitter, batch controller or adjustable flow switch. For simple flow indication the output can be fed directly to a computer.

Two types of sensors are available, Hall Effect which requires a 5 to 24 VDC power supply and Coil Effect which operates with less power, 3 to 5 VDC. Coil is required with the battery powered flow monitor. Hall Effect signals may be transmitted up to 300m without the need for conditioning whereas Coil Effect signals may be transmitted up to 16m without conditioning.



Main Features

- CPVC, PVDF, Stainless Steel or Brass sensor body
- Easy insertion system
- Different versions for remote and compact installations
- Measurement range over 50:1
- High chemical resistance
- Battery powered version
- 4-20 mA output
- MIN alarm relay output

Applications

- Water treatment and regeneration
- Industrial wastewater treatment and recovery
- Textile finishing
- Water distribution
- Processing and manufacturing industry
- Filtration systems
- Chemical production
- Liquid delivery systems
- Cooling water monitoring
- Heat Exchangers
- Swimming pools
- Pump protection

Engineering Data

- The flow sensor is available with Hall effect transducer (standard) and Coil effect transducer (battery operated)
- The Hall sensor operates with a power supply from 5 to 24 VDC @ <30 mA
- The Coil sensor operates with a power supply from 3 to 5 VDC @ <10 μ A
- The standard output is a square wave with a frequency of 45 Hz per m/s (13.7 Hz per ft/s) nominal
- The output signal is provided directly via electric cable or via a cable plug according to DIN 43650-B/ISO 6952. Supplied cable is standard 8m (26.4 ft) long, with a maximum length of 300 m (990 ft) for Hall sensor and 16 m (52.8 ft) for Coil sensor
- In the versions with 4-20 mA or MIN alarm output, an additional IP65 housing is plugged onto the sensor. Output signals are available on a terminal strip inside via a PG11 cable gland.
- The sensor F3.30 with 4-20 mA output and the sensor F3.15 with MIN alarm output require a power supply from 12 to 24 VDC.
- The nominal measuring range is from 0.15 to 8 m/s (0.5 to 25 ft/s).

type F9.00, F9.01 and F9.02 flow monitors/transmitters

Type F9.00, F9.01 and F9.02 Flow Monitors/Transmitters are designed to process the pulse signals from all FlowX3 Hall Effect flow sensors. The instruments supply voltage to the flow sensor. All units are supplied standard with a large offering of control outputs, including 4 to 20mA, open collector (pulse) and relay outputs. All have 3 line LCD displays and LED status indication for the control outputs. Modular design allows the same instrument to be mounted in three different ways: directly to the flow sensor or remotely either panel or wall mount.

Self explaining calibration menus allow a customized set up of all measuring parameters and the state of the art electronic design ensures long-term reliable and stable signals.



Main Features

- Permanent and resettable totalizer
- Adjustable outputs
- Relay and Open Collector options
- Installation flexibility
- 3 line alphanumeric LCD
- IP65 monolithic packaging
- 5 button keypad
- Output simulation for system testing
- One packaging for compact/pipe, panel or wall installation
- Self explaining calibration menus
- Auto-calibration

Engineering Data

- The flow transmitter is designed with only one packaging for compact/pipe, panel or wall installation
- The flow transmitter has 1/4 DIN panel mount standard dimensions: 96 x 96 mm (3.8 x 3.8 inch)
- The instrument meets IP65 standards
- The instrument provides flow rate indication and dual totalization with fully scaleable engineering units
- The flow transmitter is equipped with a 3 line LCD: 2 x 12 alphanumeric lines and 1 icon line
- The flow transmitter is equipped with a silicone rubber 5 button keypad
- The flow transmitter is compatible with all FLS FlowX3 Hall Effect Flow Sensor
- The instrument provides auto-calibration and simulation options

Applications

- Flow control and measuring
- Water treatment and regeneration
- Industrial wastewater treatment and recovery
- Water distribution
- Leak detection
- Processing and manufacturing industry
- Textile finishing
- Finishing systems
- Chemical Industry
- Liquid delivery systems
- Auxiliary plants
- Swimming pools and spas

Displays

Flow Rate	- 5 digits
Resettable Total	- 6 digits
Non-Resettable Total	- 10 digits

Need advice?

Our expert team are here to help.
Call our freephone:

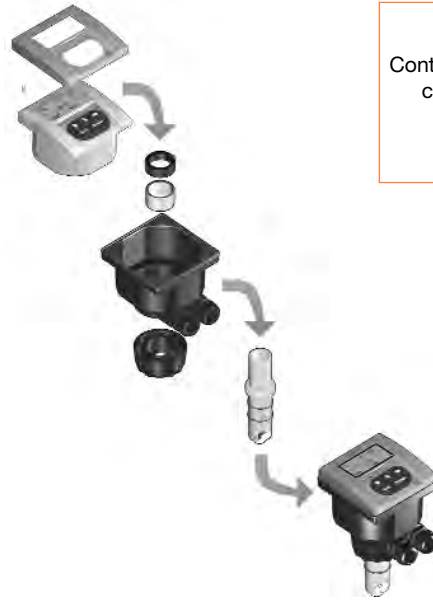
0800 975 79 71

Or from outside of the UK:
+44 191 521 3111



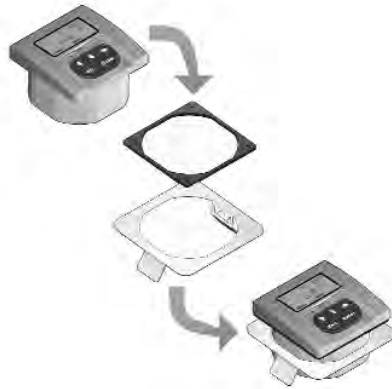
instrument mounting kits

Compact Mounting



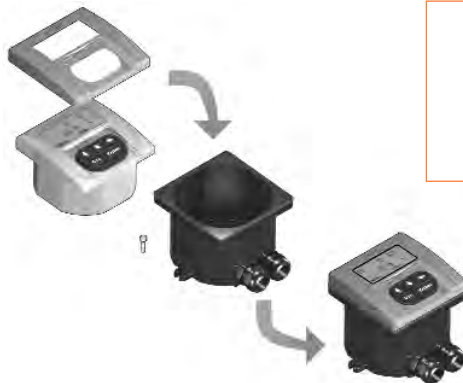
Code: F9.KC1
Contains plastic adaptor with gasket,
compact cap, locking ring and
4 fixing screws

Panel Mounting



Code: F9.KP1
Contains mounting bracket
with gasket

Wall Mounting



Code: F9.KW1
Contains plastic adaptor with
gasket and fixing screws

Tee Fittings



For connection to PVCU, PVCC, PP and PVDF. Available in sizes up to 50mm/1 1/2"

Clamp Saddle Fittings



Suitable for use with both metric and inch size pipe from 63mm/2" - 315mm/12"

Metal Strap-On Saddles



Primarily for use with metal pipes, but can be used with thermoplastic pipe also. Available in sizes from 90mm/3" - 450mm/18"

Wafer Fittings



For mounting between flanges in pipe of all materials. Sizes from 250mm/10" - 315mm/12"

Stainless Steel Tee Fittings



For connection to stainless steel piping only. In sizes 3/4", 1" & 1 1/4"

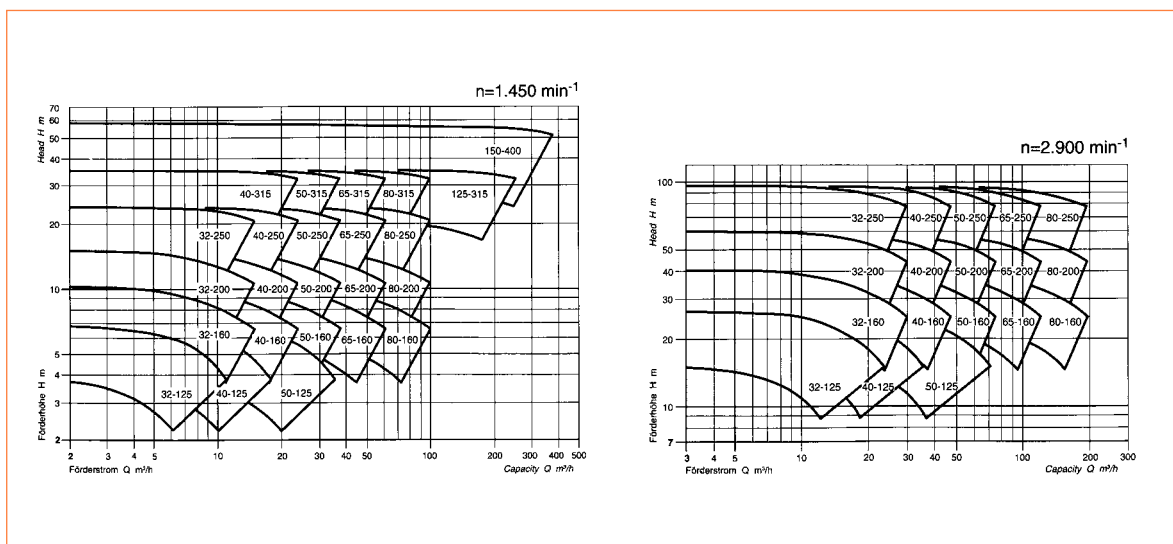
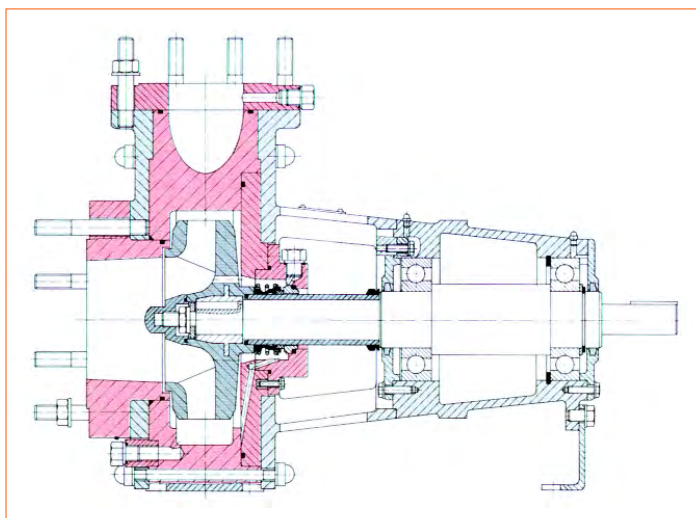
Chemical Pumps, Type NM

- ✓ High operational reliability
- ✓ For aggressive fluids including acids, bases and solvents
- ✓ Flow capacity up to 380 m³/hr
- ✓ Head up to 98m
- ✓ Available in Polyethylene (HDPE), Polypropylene (PP), PVDF and UHMW-PE for abrasive duties
- ✓ Simple and fast replacement of all critical parts
- ✓ Sizes from 32-125mm to 150-400mm

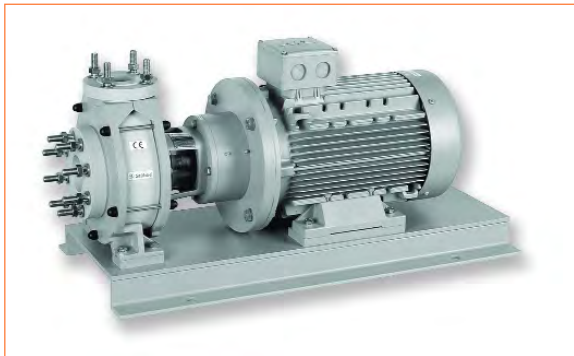


Horizontal, single-stage, end-suction standard pump, back-pull out design, to BS 5257/ISO 2858.

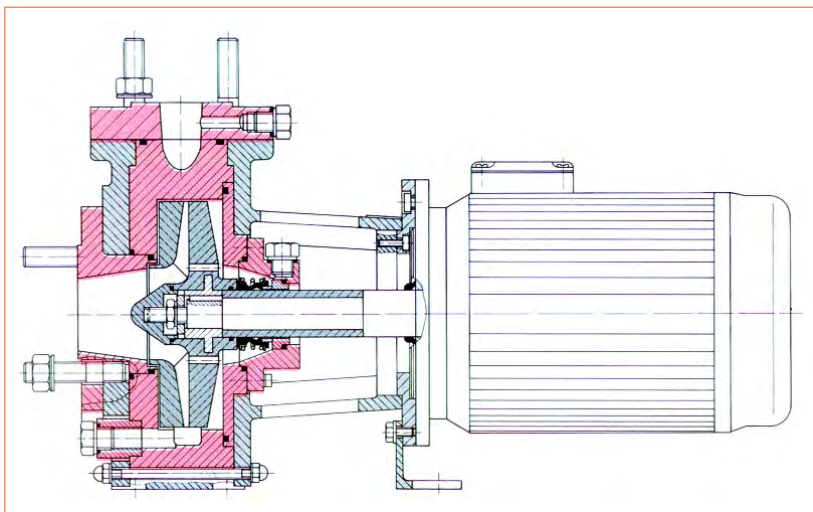
- Casing with high wall thickness is diffusion tight and vacuum resistant. It is strengthened by an additional cast iron body covering external forces and moments.
- The closed impeller is designed with compensation of axial thrust and fixed to the shaft independent of direction of rotation.
- Shaft sealing by single or double acting mechanical seal on corrosion resistant shaft sleeve.



Close Coupled Pumps, Type NMB and NMB-S



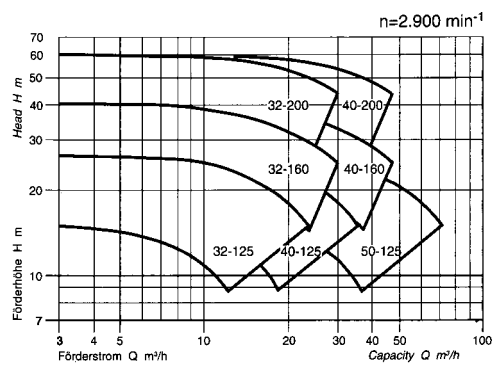
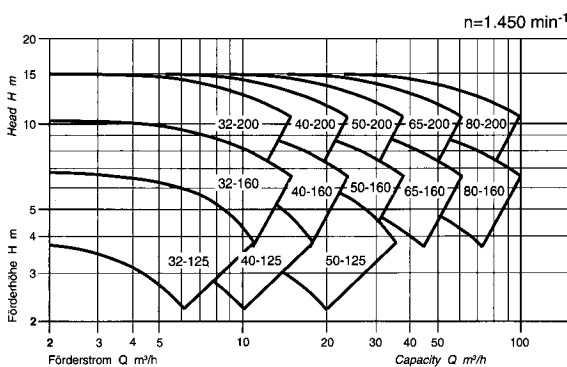
- ✓ Reliable configuration
- ✓ For aggressive fluids including acids, bases and solvents
- ✓ Flow capacity up to 100 m³/hr (NMB) and 200m³/hr (NMB-S)
- ✓ Head up to 60m
- ✓ Available in Polyethylene (HDPE), Polypropylene (PP), PVDF and UHMW-PE for abrasive duties
- ✓ Simple and fast replacement of all critical parts
- ✓ Sizes from 32-125mm to 80-200mm (Type NMB)
- ✓ Sizes from 32-160mm to 80-315mm (Type MB-S)



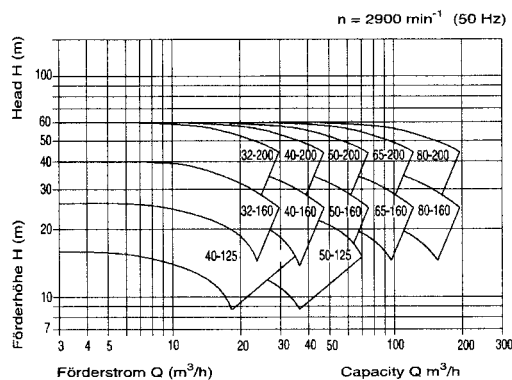
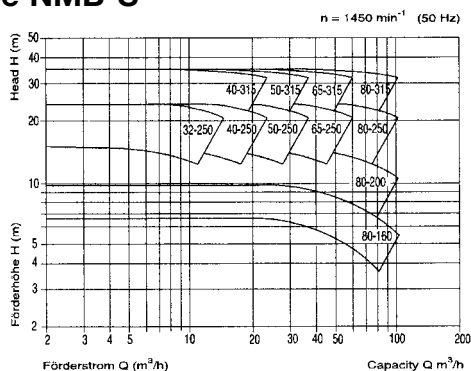
Closed coupled chemical standard pumps in back-pullout design, to ISO 2858. Using the ASV modular design system, most parts of the pumps of the type NMB are identical with type NM.

- The pump is directly coupled with an electric motor, the impeller is fixed on to the covered motor shaft, independent of direction of rotation
- Shaft sealing by single or double acting mechanical seal on corrosion resistant shaft sleeve.
- Type NMB-S features a new larger capacity motor

Type NMB



Type NMB-S



Vertical Sump Pumps, Type ET and Type ETT

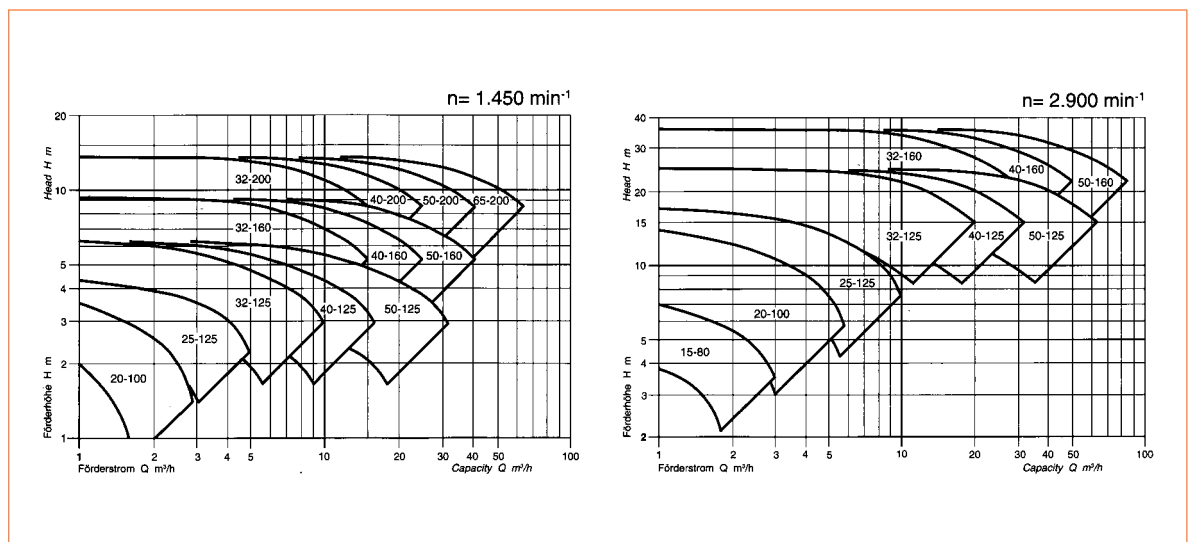
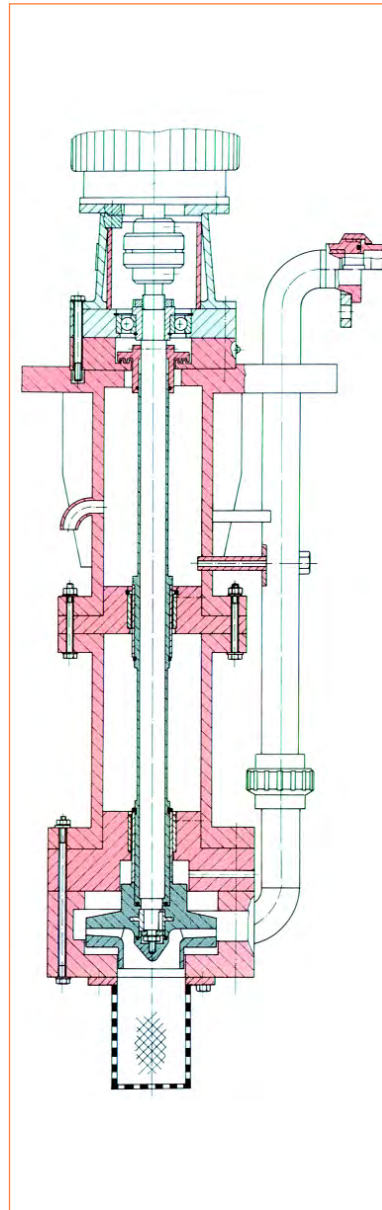
- ✓ Close coupled design
- ✓ For normal or aggressive fluids
- ✓ Flow capacity up to 120 m³/hr
- ✓ Head up to 55m
- ✓ Immersion depths from 500mm to 2000mm
- ✓ Suction tube extension up to 1.5m
- ✓ Available in Polypropylene (PP), PVDF and UHMW-PE for abrasive duties
- ✓ Sizes from 15-80mm to 65-250mm
- ✓ Dry running safe (Type ETT)

Vertical sump pumps - depth from 500mm with steps of 250mm up to 2000mm. Pump casing and impeller corresponding to type NM.

- The SS-shaft is covered by a corrosion resistant and diffusion-tight thermoplastic sleeve and guided by slide bearings of PTFE or carbon/SiC and SiC/SiC, medium-lubricated.
- A special pressure drop device prevents flushing of solids into the slide bearings and extends their service life.
- The shaft seal with a liquid filled labyrinth operates against vapour only and is not flushed by the medium.

Type ETT uses the modular type ET design and provides dry running capabilities.

- The slide bearings of HD-carbon/SiC are normally lubricated and cooled by the liquid. With ETT-pumps and if liquid is not available - e.g. up to an empty tank - the bearings are cooled by an air-stream through especially designed bearings and support tube.



Dry Running Protected Vertical Sump Pumps, ETL and ETLB

- ✓ Dry running safe
- ✓ For clean, aggressive or abrasive fluids
- ✓ Flow capacity up to 104 m³/hr
- ✓ Head up to 36m
- ✓ Immersion depths from 300mm to 775mm
- ✓ Suction tube extension up to 1.5m
- ✓ Available in Polypropylene (PP), PVDF and UHMW-PE for abrasive duties
- ✓ Sizes from 15-60mm to 80-200mm

Sectional drawing of type range ETL with bearing housing outside of the tank.

Direct coupled sump pump, type ETLB, depth 300/500mm. ▼

Vertical sump pumps type ETL and ETLB run without medium-lubricated slide bearings.

Using the ASV modular system, they are designed from type ET.

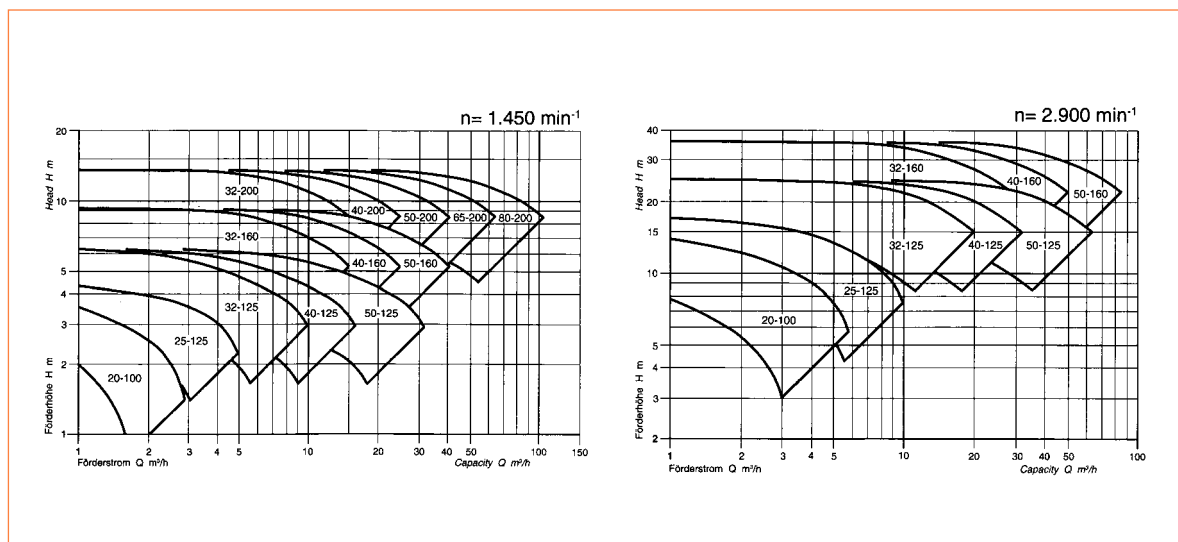
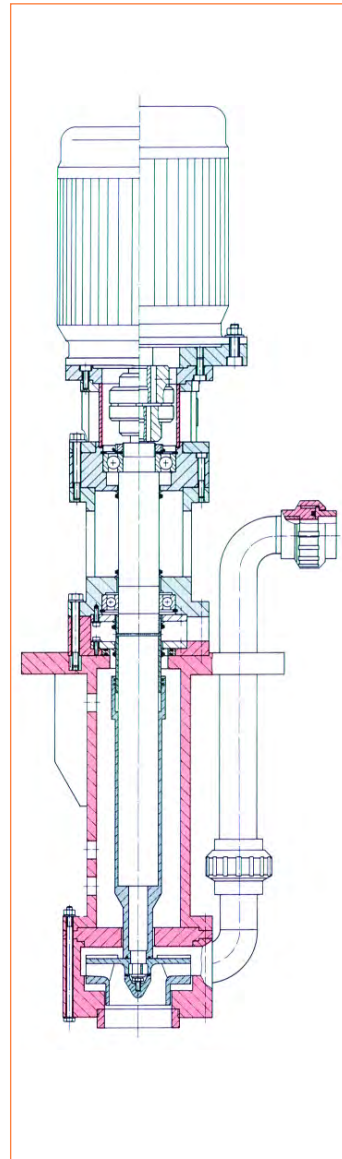
Two types according to requirements:

ETL - Ball bearings located above the medium with large axial distance for smooth operation. Driver is a standard IEC electric motor.

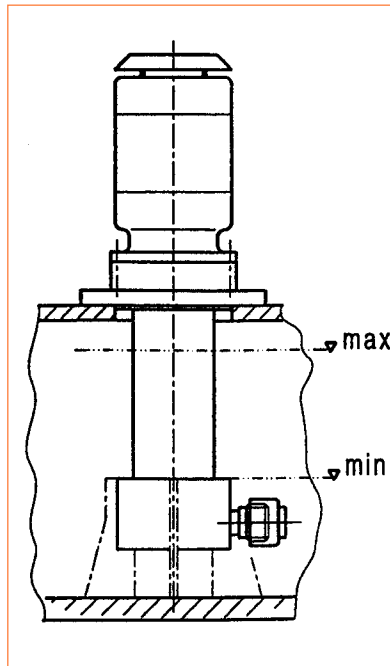
Speed $n = 1.450$ and 2.900 min^{-1} . Standard depth 500 and 750mm, with extension pipe up to 2.000mm.

ETLB - Directly coupled design with special three-phase motor.

Standard depth 300 and 500mm; extension pipe up to 1.500mm.



Vertical Sump Pump, Pull-Off Design, Type ETLB-G



- ✓ Space-saving design
- ✓ Dry running safe
- ✓ No piping outside the module
- ✓ Flow capacity up to 30 m³/hr
- ✓ Head up to 25m
- ✓ Immersion depths from 275mm or 475mm
- ✓ Available in Polypropylene (PP) or PVDF
- ✓ Sizes from 20-100mm to 40-125mm

The ASV vertical sump pumps type ETLB-G are widely used in printed circuit board (PCB) manufacturing. They have the advantage of being able to use space saving pipeline installations inside the module container. By this any leaking to the environment and/or crystallisation is avoided.

The motor, suspension pipe and impeller can be easily removed without disconnecting from the piping, greatly simplifying maintenance. No screws or bolts are required during this process.

Vertical Sump Pump Type ETLB-T

Dry-well Design

- ✓ For external installation
- ✓ No leaking - controlling level of fluid and returning it into a reservoir tank
- ✓ Dry running safe
- ✓ Flow capacity up to 30 m³/hr
- ✓ Head up to 25m
- ✓ Available in Polypropylene (PP) or PVDF
- ✓ Sizes from 15-60mm up to 40-125mm



Dry-well design sump pumps are used for such applications where due to space, process technology or media, sump pumps have to be installed outside of the tank.

Applications include the pumping of fluids used in environmental technology, sewage treatment, laquering plants and in the recycling industry.

Vertical Sump Pump Type ETLB-X

Multi Stage

- ✓ 2 or 3 stage design
- ✓ Sizes: 2-stage 32 - 125 - 2
3-stage 25 - 100 - 3
- ✓ Dry running safe
- ✓ Flow capacity up to 28 m³/hr
- ✓ Head up to 42m
- ✓ Available in Polypropylene (PP) or PVDF
- ✓ Immersion depth 275mm or 475mm



Standard Version



Dry-well Version

ASV close coupled sump pumps are designed for vertical installation in non-pressure containers, open tanks or pits.

Applications include the pumping of fluids used in chemical or pharmaceutical manufacturing, metal finishing, or water and waste treatment.

Small Capacity Plastic Pumps

KHB/SHB



KMB



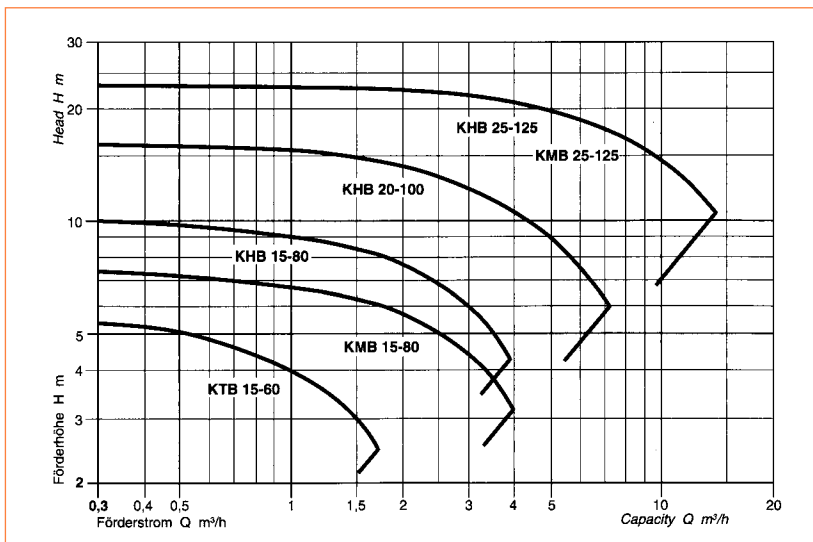
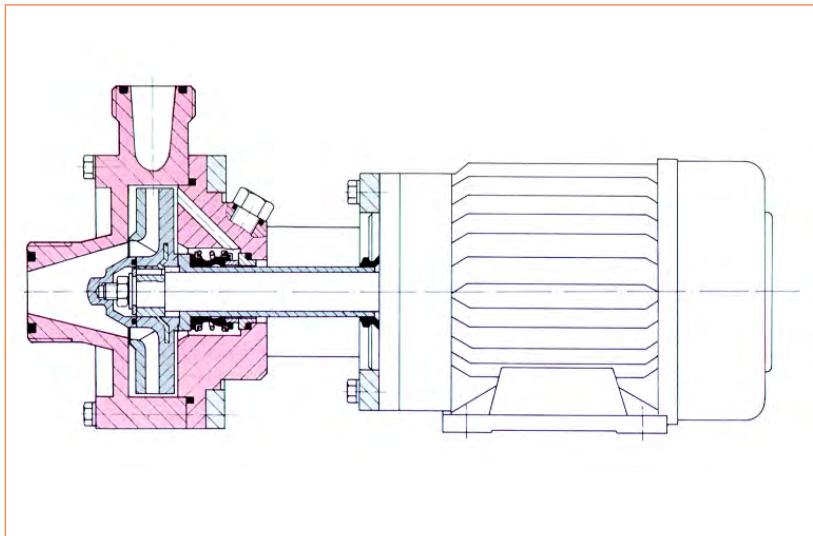
ETLB



Single stage, end-suction centrifugal pumps with small capacities. Direct coupled to a special single or three-phase electric motor. Pump casing and wetted parts of high quality thermoplastic material like PP, HD-PE and PVDF. Closed impeller with shaft sleeve, fixed to the motor shaft, independent from direction of rotation. Shaft sealing by mechanical seals.

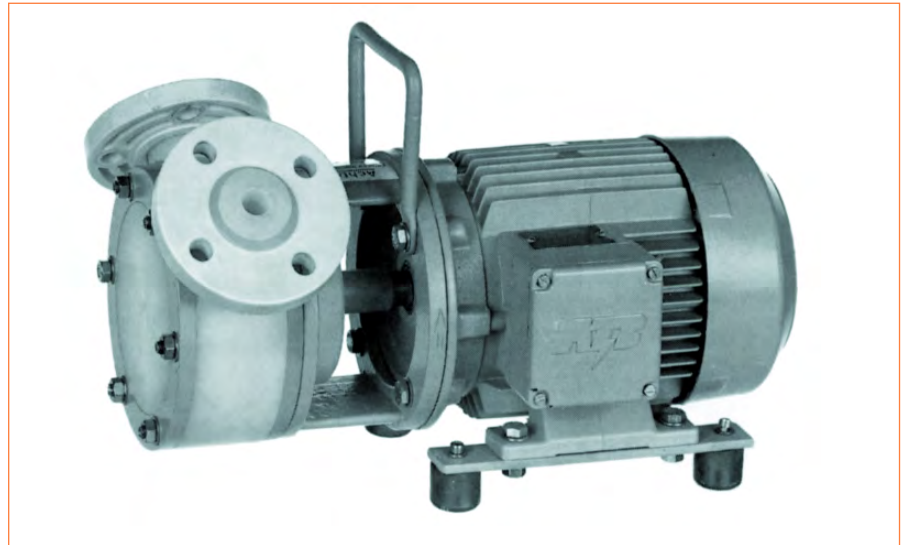
Types (see pictures):

- KHB
 - Horizontal design
 - Sizes from 15-80mm to 25-125mm
- ETLB
 - Vertical sump pump
 - From the ETLB range Size 15-60mm
- KMB
 - Horizontal design
 - Seal-less and hermetically sealed, with mechanical coupling
 - Sizes 15-80mm and 25-125mm
- SHB
 - Horizontal design
 - Sizes from 25-125mm to 40-125mm



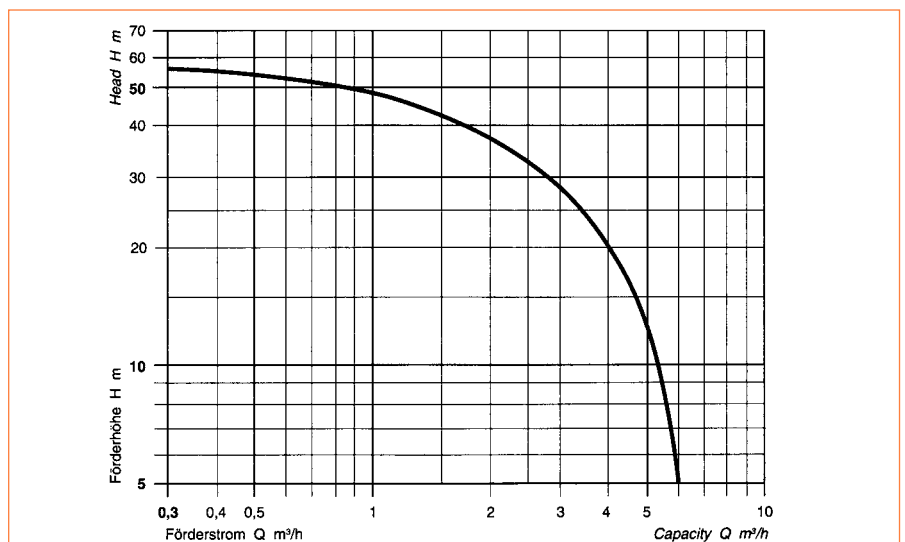
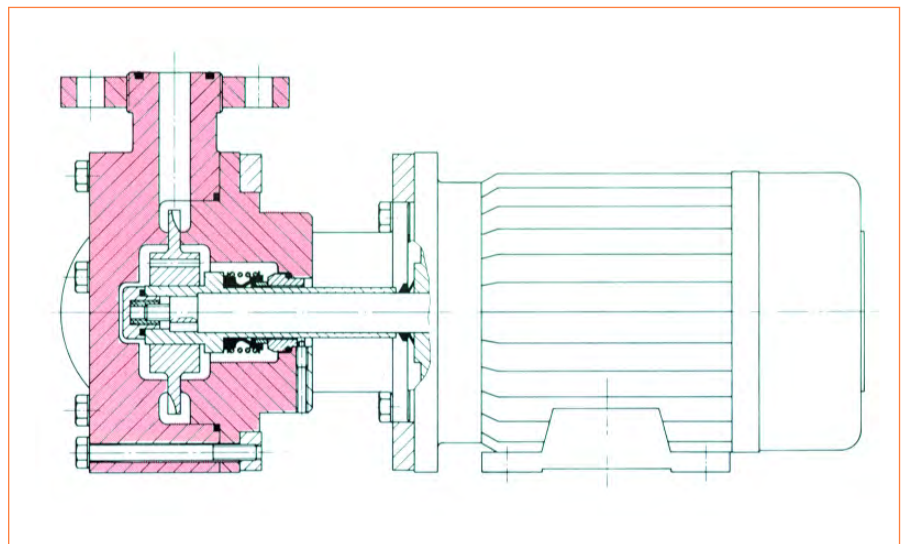
Peripheral Pump, Type PB

- ✓ Available in Polypropylene (PP), PVDF, Polyethylene (HDPE) and PTFE
- ✓ Flow capacity up to 6 m³/hr
- ✓ Available in size 25-100mm

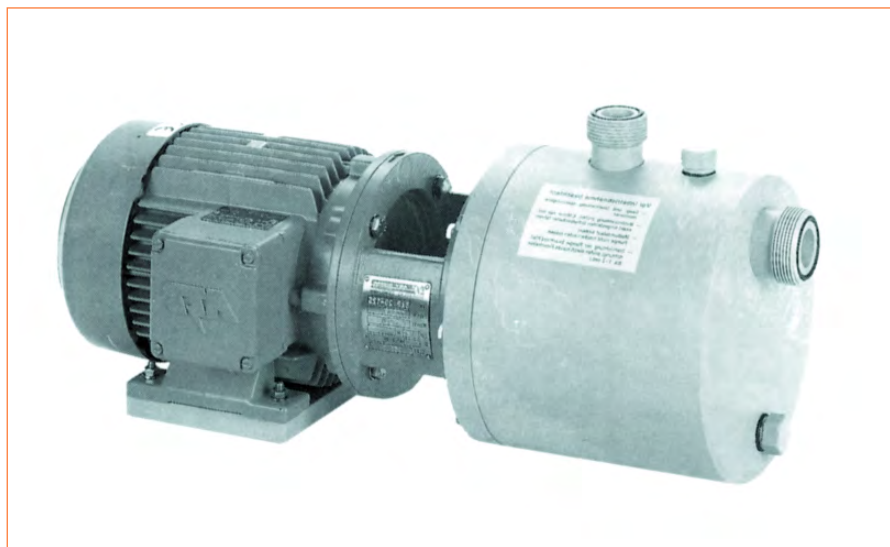


With the PB it is possible to reach relatively high pressure head together with low flow-capacity - see characteristic curve.

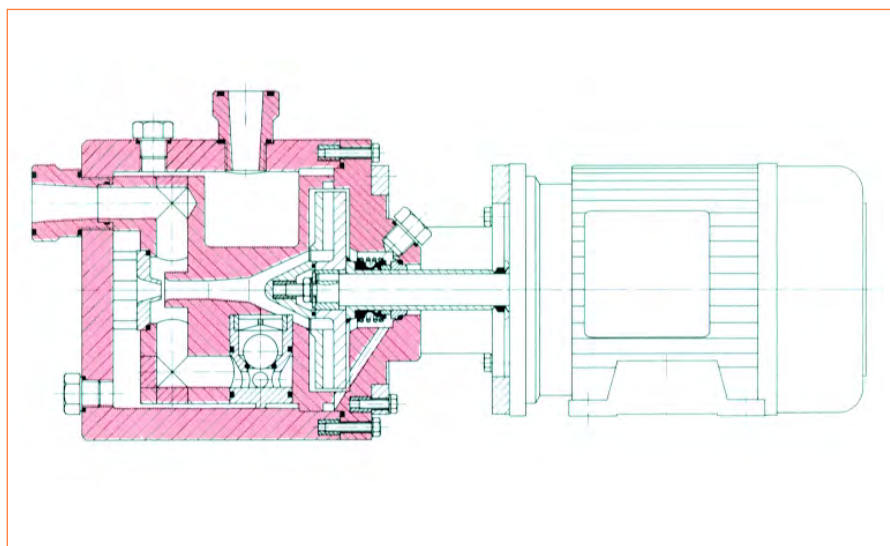
- Peripheral pumps have symmetrical impellers, therefore they are independent of the direction of rotation and may operate cw or ccw.
- Peripheral pumps handle low viscosity, neutral or aggressive liquids or mixed fluids as well as gas or air impurities in the liquid without affecting the pump characteristic.
- Shaft sealing is by single or double acting mechanical seal on a corrosion resistant shaft sleeve.



Self-Priming Centrifugal Pump, Type SAP



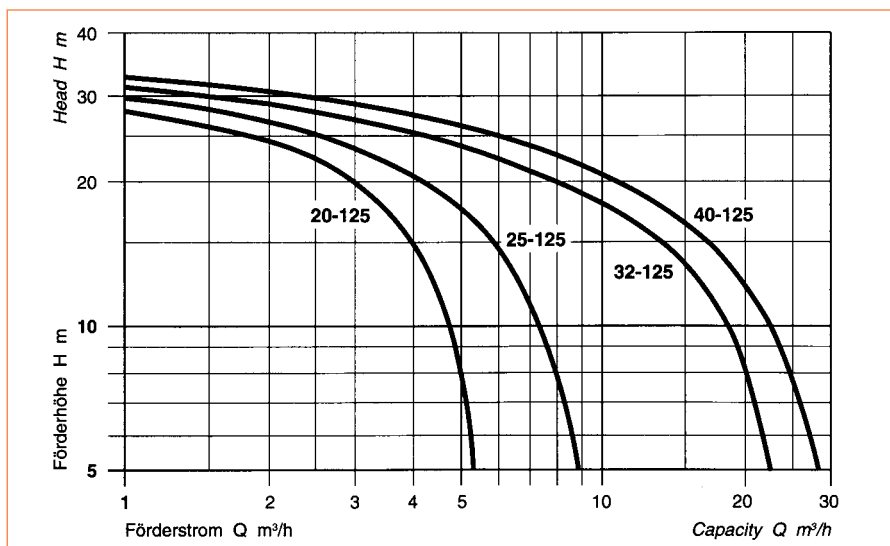
- ✓ Self-priming
- ✓ Available in Polypropylene (PP), Polyethylene (HDPE) and PVDF
- ✓ Flow capacity up to 29 m³/hr
- ✓ Head up to 33m
- ✓ Sizes from 20-125mm to 40-125mm



Self-priming centrifugal pumps, type SAP offer a novel combination of direct coupled pumps.

This combination of pumps has the possibility to double the capacity by means of integrated valve-technology and to reach a suction head up to approx. 7.0m.

- All parts that are in contact with the liquid are made of high quality thermoplastic materials such as PP, HD-PE and PVDF.
- Shaft sealing by single or double acting mechanical seal on corrosion resistant shaft sleeve.
- The pumps are directly coupled with an IEC standard electric motor with $n=2.900 \text{ min}^{-1}$.
- Self-priming pumps type SAP are in use for handling low viscous, neutral or aggressive liquids or mixed fluids.



Self-Priming Eccentric Pump, Types F, L, FF and LF

- ✓ Self-priming Pump available in Polypropylene (PP), Polyethylene (HDPE) and PVDF
- ✓ Lining available in CR, NBR, CSM, EPDM and FPM
- ✓ Large diameter drive shaft bearings
- ✓ Type F and L with constant rotational speed
- ✓ Type FF and LF with variable rotational speed

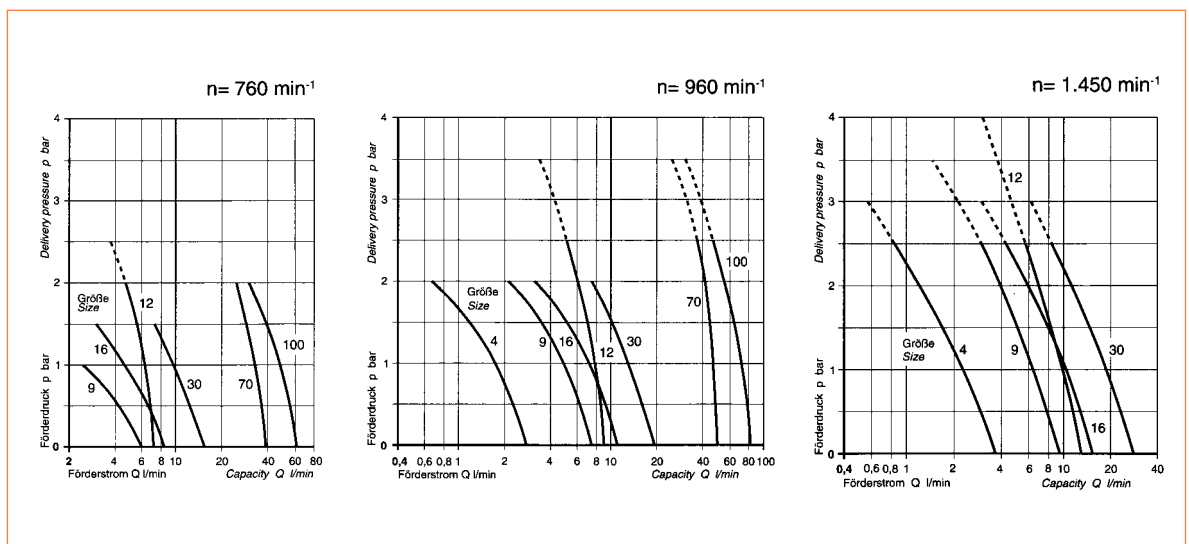
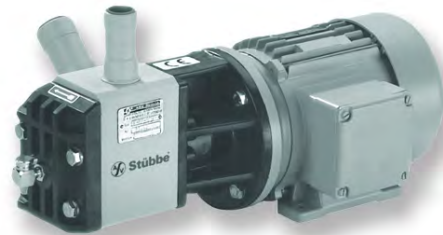
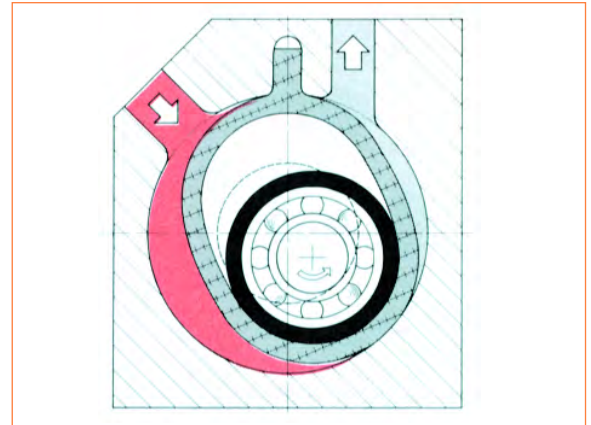
Self-priming, positive displacement pump with the diaphragm ring or the liner, clamped into the casing. An eccentric rotor lubricated by oil rotates inside the liner and forms the cavities between liner and casing.

Two types according to requirements:

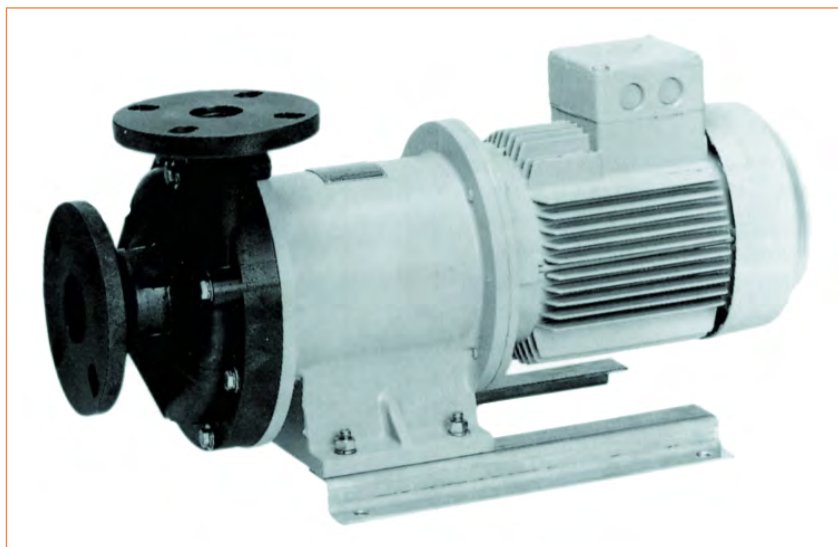
Type F and L - Directly flanged to a standard electric motor (F) or with bare shaft end (L), IEC-motor, elastomer coupling and baseplate.

Type range FF and LF - Flanged or foot mounted. Motor with integrated Micro-frequency converter.

- Pump speed/frequency control for exact capacities (25 ... 100%) and increasing the pump efficiency.
- Manually/automatically controlled according to capacity, pressure, pH-value, temperature, current consumption etc. Signals e.g. 0-10mV, 4-20mA.



Magnetic Drive Pump, Type ASV-MAX



- ✓ High reliability
- ✓ Dry running safe
- ✓ Pump body made from reinforced material
- ✓ Flow capacity up to 50 m³/hr
- ✓ Head up to 35m
- ✓ Media density up to 1.9kg/dm³

Magnetic drive pumps of type ASV-MAX with dry running capacity allow safe use in irregular conditions.

- ASV-MAX pumps are hermetically enclosed and emission-free, thus ideal for environmental protection when handling dangerous liquids.
- New developed slide bearings are suitable to cover the friction heat during short dry running periods.
- Inner magnet covered by plastic is one part together with the impeller.
- All parts of the ASV-MAX, which are in contact with the liquid to be handled as well as the body of high quality PP^{GF} and ECTFE^{CF}, slide bearings of HD-Carbon and SiC.

