

Identity Code: EXtronic

Series:
EXBa
EXtronic
Version a

E S	Type of enclosure: Explosion protection Fire-damp and explosion protection: permissible liquid end material - PTFE & Stainless Steel			Pump version: 1st and 2nd figure = Backpressure (bar) 3rd and 4th figure = Capacity (L/h) *Type 2502 & 2505 only available in SS and SB **Type 1310 only available in NP, PP4, SS and SB †Type 0430 & 0260 not available in SS2		
	1000	2502*	2505*	1601	1006	1310**
	1201	0613	0814	0803	0417	0430†
	1002		0260†	0308		
	PP1	Liquid end materials: Polypropylene with EPDM O-rings				
	PP4	Polypropylene for high viscosity fluid with enlarged ports, with EPDM O-rings & Hastelloy C valve springs (Only for type 1002, 1006, 1310 & 1014)				
	NP1	Arcylic with PVC check valves & Viton® O-rings				
	NP3	Arcylic with PVC check valves & Viton® O-rings				
	NS3	Auto-degassing Arcylic with Viton® O-rings (Only for type 1601, 1201, 0803 & 1002)				
	PS3	Auto-degassing PVC with Viton® O-rings (Only for type 1601, 1201, 0803 & 1002)				
	TT1	Carbon-reinforced PTFE with PTFE seals				
	SS1	316 SS with PTFE seals (Only for types 0430 & 0260)				
	SS2	316 SS with PTFE seals, 1/4" FNPT thread				
	SB1	316 SS with PTFE seals, R 1/4" internal thread, R 1/2" for type 0260 (Recommended for combustible media)				
	0	Valve springs: Without springs				
	1	With 2 springs, 316 SS, 1.4 psig (0.1 bar)				
	A	Electrical connection: 230 V 50/60 Hz 1 phase				
	B	115 V 50/60 Hz 1 phase				
	E	500 V 50/60 Hz 1 phase				
		Cable length: 6 ft (2 m) open end				
	0	Control type: Stroke rate adjustment via potentiometer				
	1	External contact				
	2	Analog 0-20 mA				
	3	Analog 4-20 mA				
	4*	External contact, intrinsically safe [i,a]				
	5*	Analog 0-20 mA, intrinsically safe [i,a]				
	6*	Analog 4-20 mA, intrinsically safe [i,a]				
		* Intrinsically safe only with E=Ex protection				
	0	Control variant: With potentiometer (Only for control type 0)				
	1	With momentary contact push-button switch for maximum stroke rate (Not for control type 0)				
	2	With spring-return change-over switch for maximum frequency rate (Not for control type 0)				
	0	Approval/Language: BVS - Europe, German, 100 V - 500 V				
	1	BVS - Europe, English, 100 V - 500 V				
	2	FM - USA, English, 115 V, 230 V				
	3	CSA - Canada, English, 115 V, 230 V				

EXBa E 1006 PP1 1 A 3 1 2

Technical Data:

EXtronic Metering Pumps for Hazardous Locations

Pump Version	Capacity at max. backpressure			Max. stroke rate spm	Connectors Tube/NPT fitting PP/ NP/NS/PS/TT inches	Capacity at 1/2 max. backpressure			SS1	SS2	SB1	Water Suction lift ft. (m)	PP/NP/TT-S Shipping weight lbs. (kg)
	psig (bar)	GPH (L/h)	mL/stroke			psig (bar)	gph (L/h)	mL/stroke					
1000	145 (10)	0.06 (0.2)	0.032	120	1/4 x 3/16	72.5 (5)	0.08 (0.3)	0.042	6mm Swage	1/4" FNPT	1/4" FNPT	4.9 (1.5)	27-36 (12-16)
1601	232 (16)	0.26 (1.0)	0.14	120	1/4 x 3/16	116 (8)	0.34 (1.3)	0.18	6mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	27-36 (12-16)
1201	174 (12)	0.45 (1.7)	0.23	120	1/4 x 3/16	87 (6)	0.53 (2.0)	0.28	6mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	27-36 (12-16)
0803	116 (8)	0.98 (3.7)	0.51	120	1/4 x 3/16	58 (4)	1.03 (3.9)	0.54	6mm Swage	1/4" FNPT	1/4" FNPT	9.8 (3)	27-36 (12-16)
1002	145 (10)	0.61 (2.3)	0.31	120	1/2 x 3/8	72.5 (5)	0.71 (2.7)	0.38	8mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	27-36 (12-16)
0308	43.5 (3)	2.27 (8.6)	1.2	120	1/2 x 3/8	21.8 (1.5)	2.72 (10.3)	1.43	8mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	27-36 (12-16)
2502	363 (25)	0.53 (2.0)	0.28	120	1/2 x 3/8	290 (20)	0.58 (2.2)	0.31	8mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	29-38 (13-17)
1006	145 (10)	1.59 (6.00)	0.83	120	1/2 x 3/8	72.5 (5)	1.90 (7.2)	1.00	8mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	29-34 (13-15)
0613	87 (6)	3.46 (13)	1.82	120	1/2 x 3/8	43.5 (3)	3.94 (14.9)	2.07	8mm Swage	1/4" FNPT	1/4" FNPT	18.0 (5.5)	29-38 (13-17)
0417	50.8 (3.5)	4.60 (17.4)	2.42	120	1/2 x 3/8	29.0 (2)	4.73 (17.9)	2.49	12mm Swage	1/4" FNPT	1/4" FNPT	14.0 (4.5)	29-38 (13-17)
2505	363 (25)	1.11 (4.2)	0.64	110	1/2 x 3/8	290 (20)	1.27 (4.8)	0.73	12mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	36-45 (16-20)
1310	189 (13)	2.77 (10.5)	1.59	110	1/2 x 3/8	87 (6)	3.14 (11.9)	1.80	12mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	36-45 (16-20)
0814	116 (8)	3.70 (14.0)	2.12	110	1/2 x 3/8	58 (4)	4.07 (15.4)	2.33	12mm Swage	1/4" FNPT	1/4" FNPT	19.7 (6)	36-45 (16-20)
0430	50.8 (3.5)	7.13 (27.0)	4.09	110	1/2" MNPT	29.0 (2)	7.79 (29.5)	4.47	3/8" FNPT		3/8" FNPT	16.4 (5)	36-45 (16-20)
0260	21.8 (1.5)	15.8 (60.0)	9.09	110	3/4" MNPT				1/2" FNPT		1/2" FNPT	4.9 (1.5)	36-45 (16-20)

PP4 Models for High Viscosity Fluids

1002	145 (10)	0.61 (2.3)	0.31	120	1/2" MNPT	72.5 (5)	0.71 (2.7)	0.38				0 (0)	27 (12)
1006	145 (10)	1.59 (6.0)	0.83	120	3/4" MNPT	72.5 (5)	1.90 (7.2)	1.00				0 (0)	29 (13)
1310	145 (10)	2.77 (11.0)	1.59	110	3/4" MNPT	72.5 (5)	3.14 (11.9)	1.80				0 (0)	36 (16)
0814	116 (8)	3.70 (14.0)	2.12	110	3/4" MNPT	58 (4)	4.07 (15.4)	2.33				0 (0)	36 (16)

NS/PS Models with Self-degassing Liquid Ends

Pump Version NS/PS EXBa	Capacity at Maximum Backpressure					Max. Stroking Rate spm	Connectors Tube/NPT fitting PP/ NP/NS/PS/TT inches	Suction Lift ft. (m)	Shipping Weight lbs. (kg)
	psig	(bar)	U.S. GPH	(L/h)	mL/ stroke				
1601	232	(16)	0.17	(0.7)	0.09	120	1/4 x 3/16	5.9 (1.8)	27 (12)
1201	174	(12)	0.26	(1.0)	0.14	120	1/4 x 3/16	6.6 (2.0)	27 (12)
0803	116	(8)	0.63	(2.4)	0.33	120	1/4 x 3/16	9.2 (2.8)	27 (12)
1002	145	(10)	0.48	(1.8)	0.25	120	1/4 x 3/16	6.6 (2.0)	27 (12)

*Shipping Weight for EXBa's Version is an additional 32 lbs. (14 kg).

EXtronic Metering Pumps for Hazardous Locations

Liquid End Materials

<u>Material</u>	<u>Liquid End</u>	<u>Suction/Discharge valves</u>	<u>Seals</u>	<u>Valve balls</u>	<u>Valve balls</u>
PP1	Polypropylene	Polypropylene	EPDM	Ceramic	Duran®
PP4*	Polypropylene	Polypropylene	EPDM	-	Ceramic
NP1	Acrylic	PVC	Viton®	Ceramic	Duran®
NP3	Acrylic	PVC	Viton®	Ceramic	-
NS3**	Acrylic	PVC	Viton®	Ceramic	-
PS3**	PVC	PVC	Viton®	Ceramic	-
TT1	Carbon-loaded PTFE	Carbon-loaded PTFE	PTFE	Ceramic	Ceramic
SS1/SS2	316 Stainless steel	316 Stainless steel	PTFE	Ceramic	316 SS

*PP4 with Hastelloy C valve springs.

**NS3 and PS3 with Hastelloy C valve springs, PVDF-coated, PVDF valve insert.

DEVELOPAN® metering diaphragm with PTFE base.

Viton® is a registered trademark of DuPont Dow Elastomers.

Duran® is a registered trademark.

Supplied as standard:

Metering pump with power cable 6 ft. (2 m). Plug not included. Connection set for hose/pipe connection as listed.

Factory Mutual System *approved*



Approved
(standard in Canada)



Approved

The EXtronic metering pumps are
registered according to DIN-VDE 0170/
0171-5.78.

Specifications: EXtronic

<i>Maximum stroke length:</i>	0.026" (0.65 mm) for pump models 1000 0.049" (1.25 mm) for all other models		
<i>Materials of construction</i>			
<i>Housing:</i>	Epoxy coated die cast aluminum		
<i>Diaphragm:</i>	PTFE faced EPDM with steel core		
<i>Liquid end options:</i>	Polypropylene, Acrylic/PVC, PTFE, 316 SS, high-viscosity Polypropylene		
<i>Enclosure rating:</i>	NEMA 4X (IP 65); insulation class F		
<i>Power supply:</i>	500V $\pm$ 6%, 50/60 Hz 230V $\pm$ 10%, 50/60 Hz 115V $\pm$ 10%, 50/60 Hz Mean power input at max. stroke frequency (W)/peak current consumption for metering stroke (A) at 230V, 50/60 Hz EXBa Type 1000, 1601, 1201, 0803, 1002, 0308: 23/25 W/0.9 A at 120 strokes/min. EXBa Type 2502, 1006, 0613, 0417: 54/61 W/2.1 A at 120 strokes/min. EXBa Type 2505, 1310, 1014, 0430, 0260: 77/83 W/3.1 A at 110 strokes/min.		
<i>Thermal protection:</i>	Yes		
<i>Check valves:</i>	all models double ball except single ball on PP4 (HV) models		
<i>Repeatability:</i>	When used according to operating instructions, $\pm$ 2%; For type 1601 with self-degassing liquid end, $\pm$ 5%.		
<i>Power cord:</i>	6 ft. (2 m) 2 wire plus ground (no plug)		
<i>External control cable:</i>	6 ft. (2 m) 2 wire		
<i>Ambient temperature range:</i>	14°F (-10°C) to 113°F (45°C)		
<i>Max. fluid operating temperatures:</i>	<u>Material</u>	<u>Constant</u>	<u>Short Term</u>
	Acrylic/PVC	113°F (45°C)	140°F (60°C)
	Polypropylene	122°F (50°C)	212°F (100°C)
	PTFE	122°F (50°C)	248°F (120°C)
	316 SS	122°F (50°C)	248°F (120°C)
<i>Max. allowable input current:</i>	50 mA		
<i>Warranty:</i>	Two years on drive; one year on liquid end.		
<i>Industry standards:</i>	Factory mutual (explosion-proof, intrinsically safe), CSA approved and CE approved. EN 50014/50018; VDE 0170/0171-5.78		
<i>Standard Production Test:</i>	100% tested for rated pressure and volume		
<i>Max. solids size in fluid:</i>	Pumps with 1/4" valves: 50 μ ; pumps with 1/2" valve: 50 μ		
<i>Controlling contact (pulse):</i>	With voltage free contact, or with semiconductor sink logic control (NPN), not source logic (PNP); with a residual voltage of <700 mV, the contact load is approximately 20 mA at +10 VDC. (Note: Semiconductor contacts that require >700 mV across a closed contact should not be used).		
<i>Necessary contact duration:</i>	100 ms		