



## **ULTRA MD**



## We are a leader in supplying extruders & complete extrusion systems specifically designed to meet the increasingly stringent demands of the medical marketplace

The ULTRA MD extruders are designed exclusively for a variety of medical applications & are typically used in a clean room environment. Our medical line of extruders (MD series) come with closed loop AC vector or optional servo motors for improved speed regulation. Replaceable feed section liners, that provide the flexibility to configure the feed geometry to best suit the application, are supplied on extruders up to 1 inch (25mm). All extruders are supplied with a special urethane based medical paint that is more chip resistant & does not "yellow" over time. There are many available options including pressure control that enables small but rapid changes to the screw speed to correct any drifting pressure that is sensed. Pressure Controls are available in sizes up to 1 1/2". Melt pump can be attached to any ULTRA MD. ULTRA MD ranges in size from 5/8" (16 mm) up to 3 1/2" (90mm).



## **Navigator® Controls**

Graham Engineering's exclusive PC-based control system is designed specifically for extrusion and extrusion blow molding machinery. Developed in 2001 as a replacement for traditional PLC-based systems, it provides more flexibility, a higher performance, with a lower cost. The Navigator control system comes in three versions to fit your needs. XC100, XC200, and XC300 provide varying integration, optimization, and customization levels to your Graham Engineering ULTRA extruder.



GENERAL			GEARBOX		BARREL HEAT					(24:1)			
Model	Bore	Nominal	Gearbox	Thrust Bearing	Number of		Barrel	Hi-Temp	Clamp	Shipping	Length	Width	Height
	(Inch/mm)	Standard	HP @ 100	B10 Life @	Barrel Heat		Zone	Barrel	Zone	Weight	(inch/mm)	(inch/mm)	(inch/mm)
		Drive Size	RPM with	100RPM and	Zones		(kW)	Zone	(kW)	(Lbs./kg)			
		(HP/kW)	a 1.50 S.F.	5000 psi/345	24:1 30:1			(kW)					
				bar	22	00.1							
075	0.75/19	2/1.5	11	823,500	3	4	1.3	2	2.0	2K/900	41/1041	36/915	77/1956
100	1/25	3/2.2	11	260,000	3	4	1.3	2	2.0	2K/900	47/1194	36/915	77/1956
125	1.25/30	5/3.7	16	4,900,000	3	4	2	3	2.0	2K/900	53/1346	36/915	77/1956
150	1.5/38	10/7.4	16	933,200	4	5	2	3	2.0	2K/900	60/1524	36/915	77/1956
175	1.75/44	15/11.1	16	216,100	4	5	2	3	2.0	3K/1360	69/1753	36/915	77/1956
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200	2/51	20/14.7	53	8,400,000	3	4	5	7.5	3.0	5K/2250	75/1905	41/1041	78/1981
250	2.5/64	40/29.4	110	5,300,000	4	5	5	7.5	3.0	6K/2700	95/2413	48/1219	80/2032
300	3/76	50/36.8	110	918,000	5	6	5	7.5	3.0	8K/3600	105/2667	48/1219	80/2032
350	3.5/89	75/55.1	125	447,500	4	5	10	N/A	3.0	9K/4050	124/3150	48/1219	82/2083

