

PROFILE

GEMINI® CONICAL (GC) TWIN SCREW EXTRUDERS

Davis-Standard's Gemini® series conical twin screw extruders provide pipe and profile processors with processing flexibility, low maintenance, and maximum productivity. This extruder line includes the GC-40 (40mm), GC-61 (61mm), and GC-65 (65mm) extruders, ACC designed with a compact machine configuration on a single base with alternate drive positioning and sizing. These extruders are engineered for custom window profiles, fence profiles, vertical blinds, capstock coextrusion and materials development, as well as quality control laboratory usage.



At A Glance

- First American-designed conical twins built for demanding service, maximum productivity, and minimum maintenance.
- Rugged, high performance gearbox with over twice the torque capacity and thrust bearing life of competitive models.
- Low rpm screws with internal sealed water-cooling systems for processing RPVC powder formulations.
- High-efficiency Thermafin air-cooled barrel heaters and sealed, water-tempered screws for simple operation, low maintenance, and energy savings.

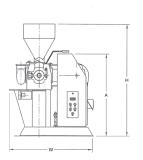


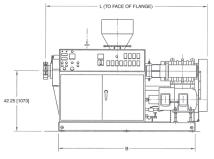
GEMINI® CONICAL (GC) TWIN SCREW EXTRUDERS cont.

MACHINE DESIGN SPECIFICATIONS

Model	GC-40	GC-61	GC-65
Diameter, Front/Rear	1.6/3.4 in. (40/86mm)	2.4/5.1 in. (61/130mm)	2.5/5.1 in. (65/165mm)
Length	34.9 in. (886mm)	51.8 in. (1,316mm)	51.8 in. (1,316mm)
Speed (Maximum RPM)	38	26	26
Tempering	Sealed in, self-regulating water or circulating oil	Sealed in, self-regulating water or circulating oil	Sealed in, self-regulating water or circulating oil
Flux Vector AC, 1750 rpm, HP (kW)	20 (15)	40 (30)	50 (37)
Ratio	17.56:1	30.1:5	30.1:5
Lubrication	Forced	Splash	Splash
AGMA rating with 1.25 SF, HP (kW)	20 (15) @ 38 RPM	78 (58) @ 30 RPM	78 (58) @ 30 RPM
Maximum Torque per Screw, ft-lbs. (N-m)	1,400 (1,900)	6,125 (8,300)	6,125 (8,300)
Thrust Bearing L-10 life at 6000 psi (414 bar)	68,000 hrs. @ 38 RPM	84,000 hrs. @ 30 RPM	84,000 hrs. @ 30 RPM
Thrust Bearing Basic Dynamic Capacity	108,000 lbs. (480 Kn)	194,200 lbs. (823 Kn)	194,200 lbs. (823 Kn)
Thrust Bearing Maximum Continuous Load	32,000 lbs. (140 Kn)	58,700 lbs. (261 Kn)	58,700 lbs. (261 Kn)
Total Connected Load, 460/3/60, A (kW)	72 (56)	129 (101)	150 (115)
Number of Barrel Zones	3	4	4
Total Barrel Heating Capacity (460 V), kW	14	32	32
Number of Die Zones, Including Flange/Adapter*	5	5	5
Total Die Heating Capacity (230 V) kW*	8.2	11.8	11.8
Pump Rating and Capacity*	15 CFM @ 29 in. in Hg (25m3/h @ 982 mbar)	15 CFM @ 29 in. in Hg (25m3/h @ 982 mbar)	15 CFM @ 29 in. in Hg (25m3/h @ 982 mbar)
Approximate Weight	5,600 lbs. (2,540 kg)	9,500 lbs. (4,310 kg)	9,500 lbs. (4,310 kg)
Approximate Output	50-180 lbs./hr (20-80 kg/hr)	100-400 lbs./hr (45-180 kg/hr)	120-600 lbs./hr (54-272 kg/hr

^{*} Dependant upon options selected.





MACHINE DESIGN DIMENSIONS

Model	GC-40	GC-61 & GC-65
A	52.8 in. (1,340mm)	57.3 in. (1,455mm)
В	69.5 in. (1,765mm)	95.5 in. (2,425mm)
Н	70.0 in. (1,780mm)	78.1 in. (1,985mm)
L	84.9 in. (2,155mm)	113.0 in. (2,870mm)
W	40.0 in. (1,015mm)	58.2 in. (1,480mm)

DAVIS-STANDARD, LLC #1 Extrusion Drive Pawcatuck, CT 06379-2313 | UNITED STATES Tel: +860-599-1010 | Fax: +860-599-6258

D-S BROOKES LIMITED 18A Brewins Way | Hurst Business Park Brierley Hill | West Midlands | DY5 1UF | UNITED KINGDOM Tel: +44 (0) 1384 471930 | Fax: +44 (0) 1384 671734

DAVIS-STANDARD - CHINA Room 6717, Apollo Building | 1440 Yan An Road (M), Shanghai 200040 | P.R. CHINA Tel: +86-21-6103 1713