

Ramo



SERIES

Single Screw Pumps (Progressive Cavity)

Pump for Chemical & Industrial Application



Pump Range

Maximum capacity : 120 m³/hr

Maximum pressure: 24 Bars

Viscosity : 1,00,000 Cst

Castings : Grey cast iron, CF-8 & CF-8M are standard casting materials. Special alloys or rubber linings are optional.

Drive shaft : En-24, SS 304, SS 316 Hard Chrome Plated Under Gland for excellent wear resistance. Solid or hollow design are standard.

Rotor : Hardened and Hard Chrome Plated rotors in En-24, Tool Steel, SS 304, SS 316, SS 316L and other exotic materials.

Universal Joint : Grease lubricated pin type fully sealed & hardened in En-24, SS 304, SS 316, SS 316L etc.

Shaft sealing : Soft Packing, Cartseal & Mechanical Seal.

Stator : Natural Rubber, Nitrile, Neoprene, Hypalon, EPDM, NCR, Silicon, Viton etc.

Principle

Single screw pumps belong to the family of rotary positive displacement pumps, which works on unique principle of Progressive Cavity Pumps. The principle feature of this pump is based on a single helical rotor turning eccentrically in a double threaded helical stator twice the pitch length. As it rotates, a series of sealed cavities, 180 degrees apart are formed, which move along the pump from suction to discharge. As one cavity is closing, the opposite cavity is increasing in size at exactly the same rate to produce a non-pulsating, positive displacement flow.



Application

Loading, Unloading, Transfer, Dosing, Draining, Re-circulation, Feeding to spray driers, Filter presses, Centrifuges, Digester, Evaporators etc.

Industries

Agriculture, Breweries & Distilleries, Ceramic & Refractories, Construction, Cement Industry, Chemical & Fertilizer, Dyes, Edible / Palm Oil, Effluent Treatment, Marine & Ship Building, Sugar Industry, Paint & Varnish, Paper & Pulp industry, Cellulose, Petrochemical, Sewage & Waste Water, Soaps & Detergent, Starch, Speciality Chemicals etc.

Fluid handled

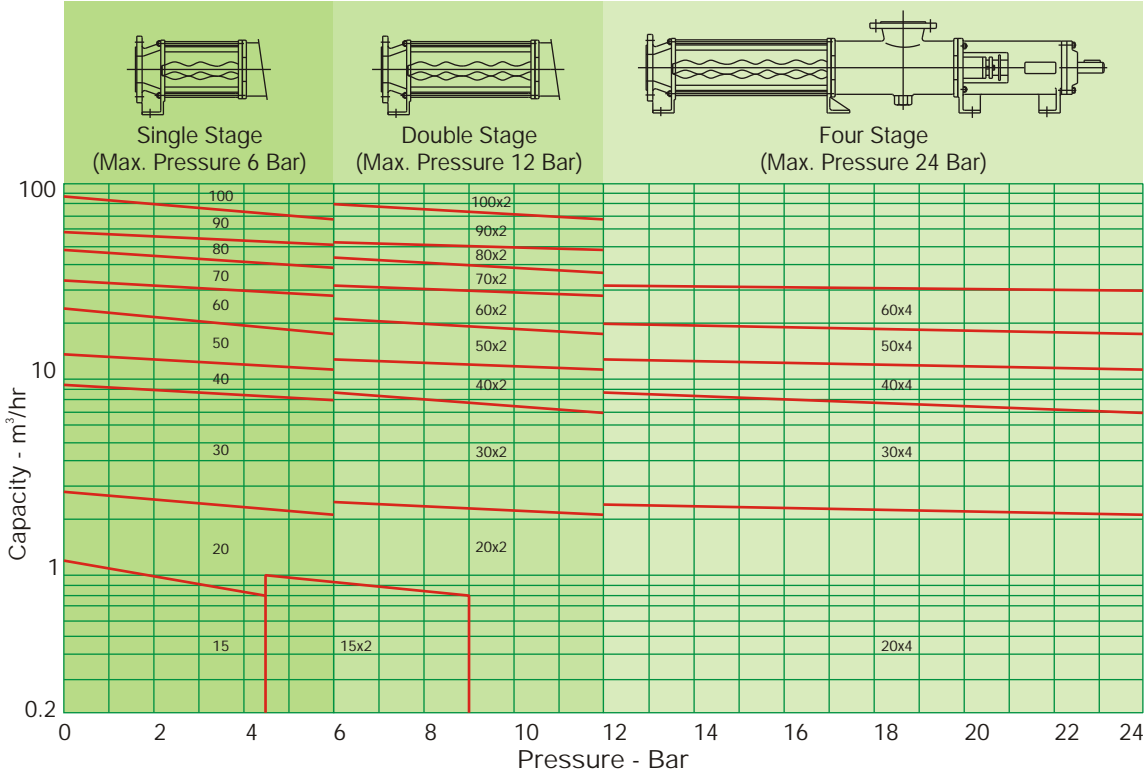
Alum Liquor, Black Liquor, Additives, Ceramic Slurry, Coating Mix, Emulsions, Effluent Sludge, Molasses, Latex, Lime Slurry, Paint, Polyelectrolyte, Oily Water & Sludge, Spent Wash, Starch Slurry, Brine Sludge, Polymer Emulsions, Edible Oil, Gum, Soap Shampoo, Printing Ink, Chemicals, Dye Stuff, Paint, Sewage & Waste Water, Gel, Oil Paste, Pigments etc.

Salient Features

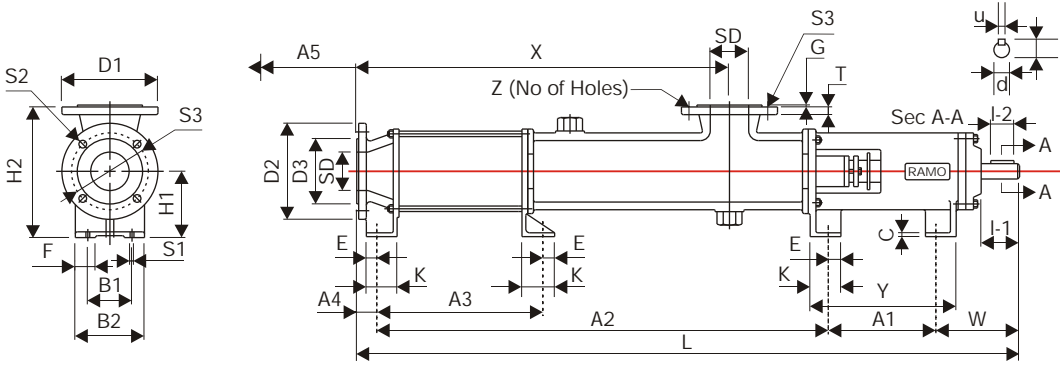
- Self priming: Hence no Foot Valve / Priming required.
- Low NPSH (R): High suction lift up to 8.5 MWC.
- Handles any liquid from water to abrasive slurry & froth to highly viscous media.
- Double sealed universal joints ensure smoother power transmission & longer life.
- Simple construction minimum wear, easy maintenance.
- Reversible: Pump can be operated clockwise as well as in anticlockwise direction by reversing the motor connections.
- Torsion free metal bonded stator for higher efficiency & per stage pressure.
- Cardan Joint as optional.
- Solid handling capacity up to 60%.

Theoretical performance data for Ramo 'G' series single screw pumps

Performance data is typical only on water at 30°C



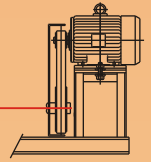
Dimensions



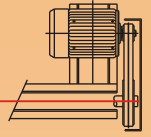
Type & Size	Basic Dimensions														Flange Dimensions							Shaft Dimensions						Wt. In KG.						
	A1	A2	A3	A4	A5	B1	B2	C	K	E	F	H1	H2	W	X	Y	L	S1	SD	S3	T	D1	D2	D3	G	S2	Z		d	I-1	I-2	t	u	
G-15	133	—	—	—	275	50	75	10	45	15	25	90	—	—	309	193	657	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0
G-15x2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	384	—	732	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5
G-20	—	442	—	—	275	50	75	10	45	15	25	90	166	101	341	193	700	10	38	100	16	140	140	78	2	16	4	22	50	40	25	6	13.0	
G-20x2	—	542	—	25	—	—	—	—	—	—	—	—	—	—	441	—	800	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	
G-20x4	—	871	457	—	—	—	—	—	—	—	—	—	—	—	763	—	1205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35.0	
G-30	177	610	—	41	355	70	92	10	50	20	28	100	200	106	511	237	940	12	50	125	20	165	165	102	3	18	4	22	50	40	25	6	34.0	
G-30x2	—	760	—	—	—	—	—	—	—	—	—	—	—	—	611	—	1090	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.5	
G-30x4	—	1190	679	—	—	—	—	—	—	—	—	—	—	—	1072	—	1536	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	56.0	
G-40	177	779	—	44	450	78	110	12	60	20	34	112	232	125	661	257	1125	12	65	145	20	185	185	122	3	18	4	28	60	40	31	8	52.0	
G-40x2	—	979	472	—	—	—	—	—	—	—	—	—	—	—	861	—	1325	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.0	
G-40x4	—	1539	893	—	—	—	—	—	—	—	—	—	—	—	1359	—	1943	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100.0	
G-50	203	977	—	44	575	92	134	14	70	25	45	132	272	157	797	293	1380	15	80	160	22	200	200	138	3	18	4	32	80	50	35	10	85.0	
G-50x2	—	1227	586	—	—	—	—	—	—	—	—	—	—	—	1047	—	1630	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96.0	
G-50x4	—	1894	1108	—	—	—	—	—	—	—	—	—	—	—	1565	—	2335	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170.0	
G-60	228	1183	401	49	700	110	142	14	75	25	40	160	310	166	956	328	1626	18	100	180	24	220	220	158	3	18	8	38	80	60	42	10	145.0	
G-60x2	—	1483	701	—	—	—	—	—	—	—	—	—	—	—	1256	—	1926	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	162.0	
G-80	270	1544	508	64	925	130	175	16	75	25	45	160	330	200	1277	370	2078	18	125	210	26	250	250	188	3	18	8	48	110	80	52.5	14	230.0	
G-80x2	—	1944	908	—	—	—	—	—	—	—	—	—	—	—	1677	—	2478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	265.0	
G-100	342	1946	659	51	1200	172	232	18	100	30	60	200	440	253	1592	482	2592	22	150	240	26	285	240	212	3	22	8	60	140	100	64	18	410.0	
G-100x2	—	2346	1059	—	—	—	—	—	—	—	—	—	—	—	1992	—	2992	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	470.0	

Above dimensions are for reference only & subject to change.

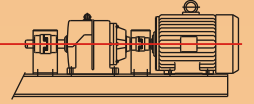
Pump drives and accessory options



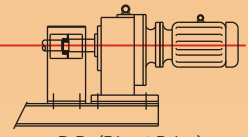
OVH (Overhead Drive) with 'V' belt, pulley and guard.



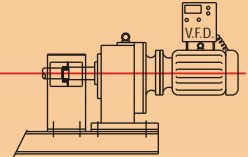
'L' shape base frame with 'V' belt, pulley and guard.



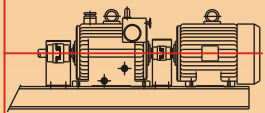
D.D. (Direct Drive) with gear box, motor and guard.



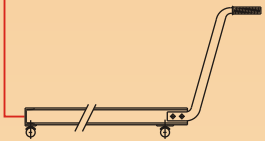
D.D. (Direct Drive) with geared motor and guard.



D.D. (Direct Drive) with variable frequency drive



D.D. (Direct Drive) with mech. Speed variable drive, motor and guard.



Trolley Mounting Option (2 Wheels / 4 Wheels)

Rep. By:

Manufactured By:



P D PUMPS & SYSTEMS

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