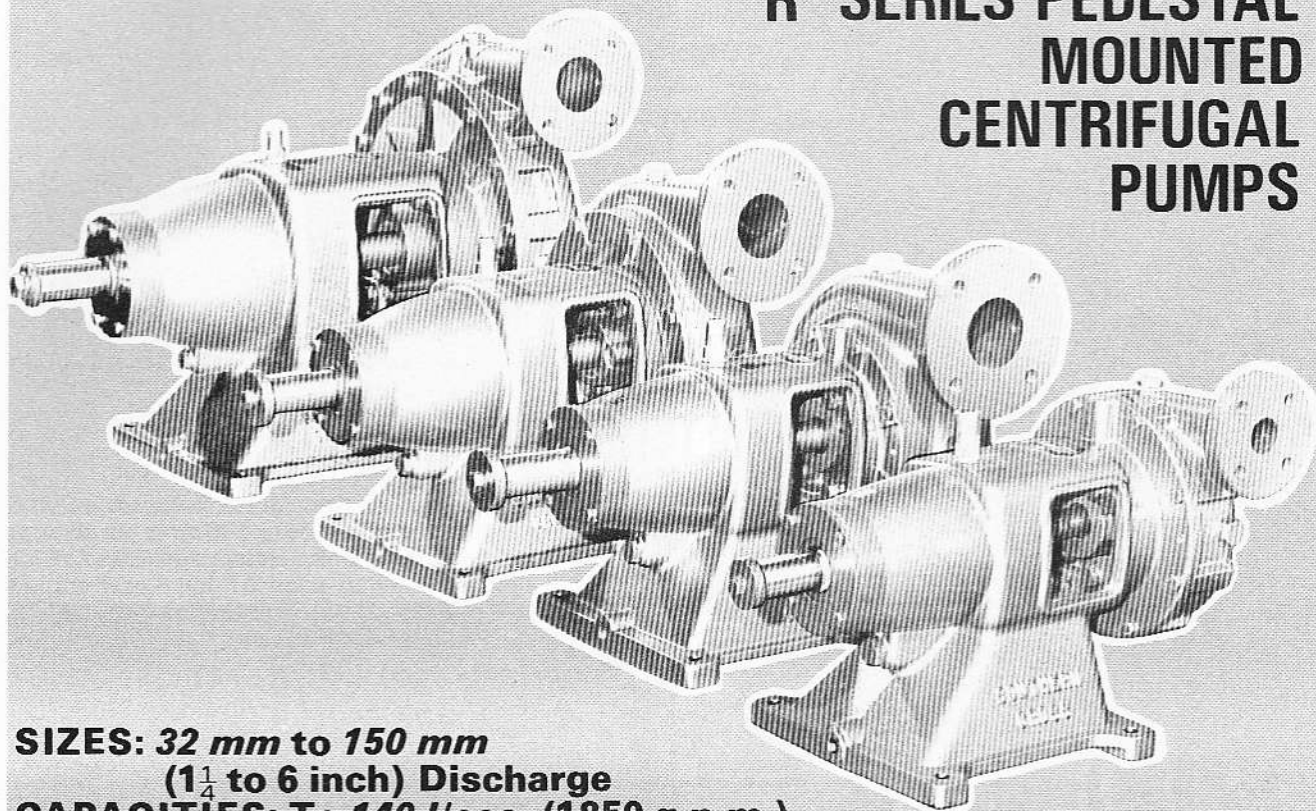


'R' SERIES PEDESTAL MOUNTED CENTRIFUGAL PUMPS



SIZES: 32 mm to 150 mm
(1 $\frac{1}{4}$ to 6 inch) Discharge
CAPACITIES: To 140 l/sec. (1850 g.p.m.)
HEADS: To 160 metres (525 feet)

SOUTHERN CROSS 'R' SERIES PEDESTAL MOUNTED CENTRIFUGAL PUMP SPECIFICATIONS

TYPE: Single stage, end suction, pedestal mounted centrifugal pumps.

PUMP CASING: Volute type of close grained cast iron with integral flanged suction and discharge connections. Tapped $\frac{1}{4}$ inch B.S.P. in both connections for fitting suction and pressure gauges. **Optional Materials:** Gunmetal, zinc-free bronze, S.G. cast iron or stainless steel. Zinc-free bronze wear rings can be fitted as optional extras.

BACKPLATE: A separate close grained cast iron backplate simplifies and reduces the cost of fitting alternative shaft seals. A reduction in cost for pumps with wetted components of optional materials is also possible using a separate backplate. **Optional Materials:** Zinc-free bronze, S.G. iron or stainless steel.

IMPELLER: Close grained cast iron (S.G. cast iron for 'RP' pumps), hydraulically and dynamically balanced, shrouded, single suction, taper mounted and keyed to shaft. **Optional Materials:** Zinc-free bronze (aluminium bronze for 'RJ' and 'RP' pumps) or stainless steel. Impeller key, acorn nut and washer are of stainless steel. Taper mounting allows easy removal of impeller and eliminates the possibility of fretting corrosion.

NOTE: Pumps with stainless steel wetted components available to special order only.

SHAFT: For use with mechanical seal. Medium carbon steel coated with chrome-manganese-stainless-steel alloy on wetted area and with induction hardened bearing seal areas and stainless steel impeller nut.

Optional Material: Grade 431 or 316 stainless steel.

SHAFT: For use with packed gland seal. Medium carbon steel fitted with replaceable gunmetal shaft sleeve and stainless steel impeller nut.

Optional Material: grade 431 or 316 stainless steel shaft and shaft sleeve. (Grade 316 not available some sizes).

MECHANICAL SEAL: 'Southern Cross' type with carbon compound rotating element running against a lapped lead-bronze mating face. Spring and backing washers are of stainless steel. Optional tapping for external clean water supply for flushing or cooling seal face. "Crane Type 2" mechanical seals can be fitted optionally without alteration. Other mechanical seals can be ordered specially.

WATER THROWER: Any gland leakage is thrown from the shaft by a rubber water thrower fitted to the shaft. This leakage is piped away via a tapped hole in the pedestal base.

TEMPERATURE RANGE: Pumped liquid temperature range -18°C to 120°C .

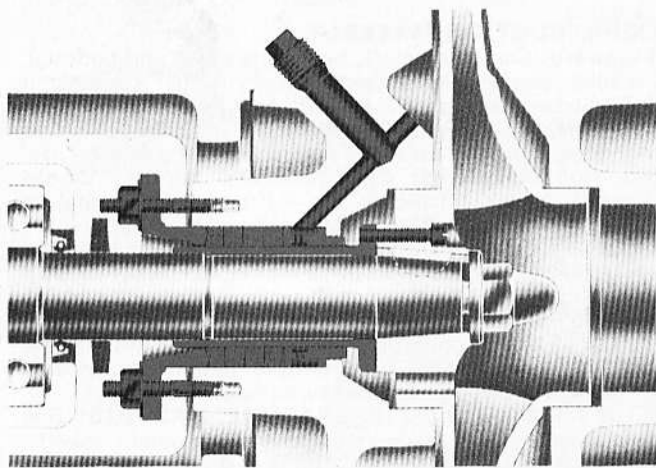


SOUTHERN CROSS

PEDESTAL MOUNTED CENTRIFUGAL

PUMPS

SOUTHERN CROSS 'R' SERIES PEDESTAL MOUNTED CENTRIFUGAL PUMP SPECIFICATIONS CONT'D



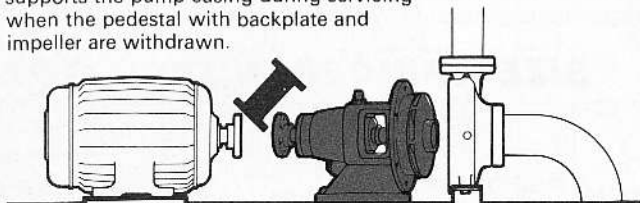
OPTIONAL PACKED GLAND SHAFT SEAL: A packed gland shaft seal is available as an optional extra on the full range of pumps. Graphite impregnated asbestos rings and a gunmetal lantern ring/throttle bush are used in the gland. A replaceable gunmetal sleeve protects the shaft through the gland eliminating the need to replace the entire shaft when worn. **Optional Materials:** Stainless steel shaft sleeves are available optionally. Gland is lubricated with water by-passed from volute or fed from an external clean water supply, or alternatively, grease lubrication can be used.

PRIMING PLUGS: Four zinc-plated mild steel plugs are fitted to volute. Where gunmetal, zinc-free or stainless steel volutes are used, plugs are of stainless steel.

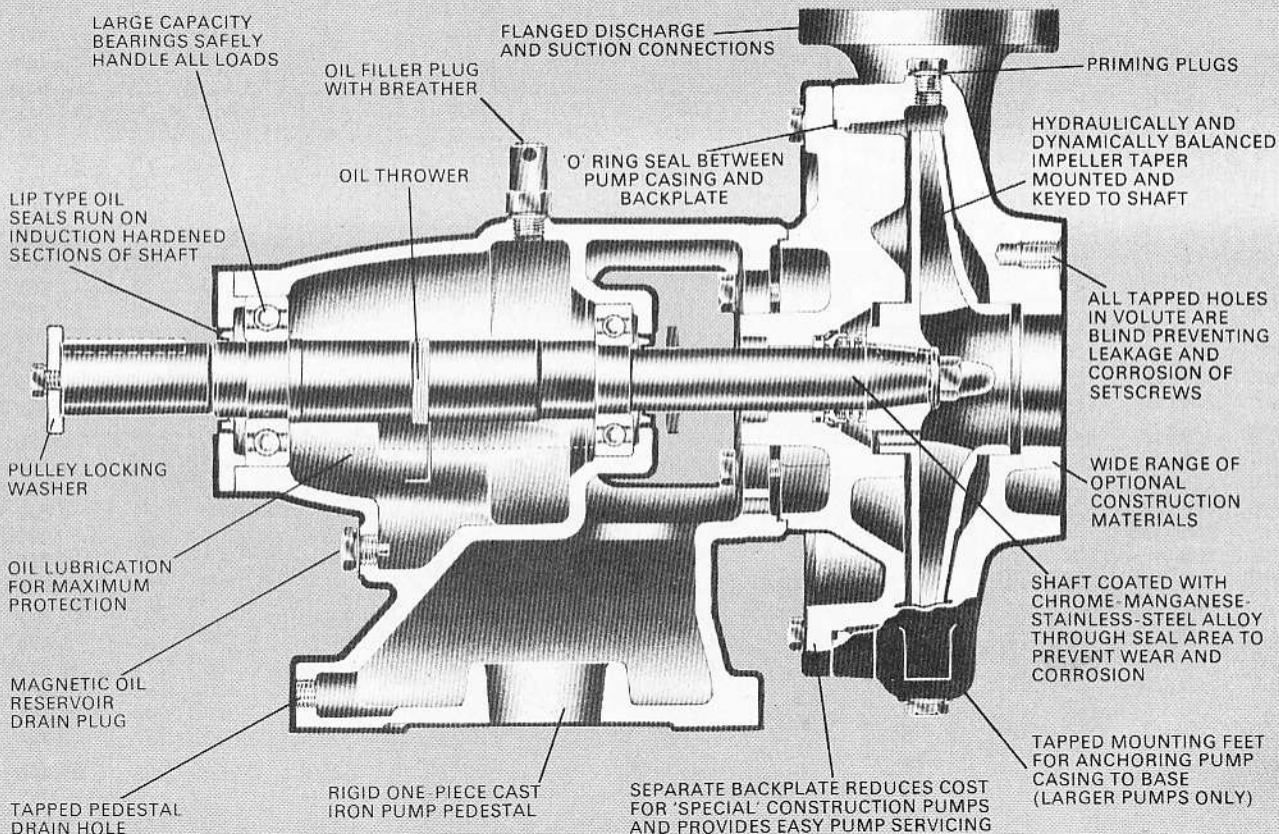
SUCTION AND PRESSURE GAUGE TAPPINGS: The volute has $\frac{1}{4}$ inch B.S.P. tapped and plugged holes for suction and pressure gauges if required.

COMPANION FLANGES FOR SUCTION AND DISCHARGE: Pumps are not supplied with companion flanges, gaskets or bolts, but these can be supplied as optional extras. Flanges are to B.S.S. table 'E'.

BACK—PULL-OUT FEATURE: By using a spacer-type coupling, the pedestal and shaft unit together with the back plate and impeller can be removed without disturbing the suction and discharge pipes or the electric motor. This is a great time-saver when maintenance has to be carried out. Back pull-out is an essential feature where pumps are used on processes which demand a minimum of stoppages. Drilled and tapped mounting feet are provided on larger pumps for anchoring pump casing to base. This extra mounting supports the pump casing during servicing when the pedestal with backplate and impeller are withdrawn.



SOUTHERN CROSS 'R' SERIES CENTRIFUGAL PUMP CONSTRUCTION FEATURES

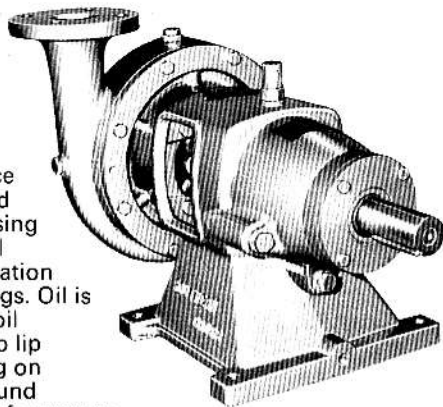




SOUTHERN CROSS 'R' SERIES PEDESTAL MOUNTED CENTRIFUGAL PUMP SPECIFICATIONS CONT'D

PUMP PEDESTAL:

The rigid one-piece pump pedestal and shaft bearing housing incorporates an oil reservoir for lubrication of the shaft bearings. Oil is distributed by an oil thrower, while two lip type seals, running on hardened and ground sections of the shaft, prevent leakage. The oil filler plug incorporates a breather for the oil reservoir. An oil level plug and a magnetic drain plug are also included. Grease lubricated bearings are available optionally except on larger pumps which use taper roller bearings.



CONSTRUCTION MATERIALS:

Standard: Cast iron volute, bearing housing and pedestal, backplate and impeller (S.G. iron impeller for 'RP' pumps and S.G. iron backplate for 'RJ' and 'RP' pumps); medium carbon steel shaft. **OPTIONAL MATERIALS:** Gunmetal, zinc-free bronze, S.G. iron or stainless steel volute; zinc-free bronze, S.G. iron or stainless steel backplate; zinc-free bronze impeller (aluminium bronze for 'RJ' and 'RP' pumps) or stainless steel; grade 431 or 316 stainless steel shaft.

Optional extras: Gunmetal wear rings in volute and backplate; mechanical seals other than SOUTHERN CROSS manufacture; packed gland shaft seals; works certified tests and witnessed tests with performance curves; companion flanges for suction and discharge; vee belt pulleys; flexible couplings and spacer type flexible couplings; impeller turndowns and optional materials as listed.

PRESSURE AND TEMPERATURE RATINGS: See table below for pressure ratings and maximum speeds. Temperature range -18°C to 120°C .

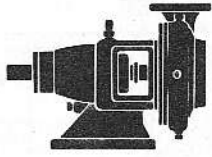
PUMP SELECTION TABLES: See page 33 for selection tables for direct coupled speeds (1,450 and 2,900 r.p.m.) and pages 34 and 35 for multi-speed selection tables.

SIZES, PRICES, WORKING PRESSURES, SPEEDS AND MASS

PUMP	SUCTION Flanged mm (in)	DISCHARGE Flanged mm (in)	Maximum Recommended Working Pressure			Maximum Pump Speed			Pump Mass kg	PRICE Standard Construction	
			Cast Iron, Zinc-Free Bronze or Gunmetal Body and Backplate		S.G. Cast Iron Body and Backplate	Cast Iron or Zinc-Free Bronze Impeller	Aluminium Bronze Impeller	Belt Drive			
			kPa	(p.s.i.)	kPa						(p.s.i.)
REA	40 (1½)	32 (1¼)	1,317	(191)	2,000	(290)	3,500	—	3,500	52	\$425
REB	50 (2)	40 (1½)	1,455	(211)	2,206	(320)	3,500	—	3,500	52	438
REC	65 (2½)	50 (2)	1,276	(185)	1,931	(280)	3,500	—	3,500	57	448
RED	80 (3)	65 (2½)	1,276	(185)	1,931	(280)	3,500	—	3,500	62	471
REE	100 (4)	80 (3)	1,248	(181)	1,896	(275)	3,500	—	3,500	64	500
RFA	40 (1½)	32 (1¼)	2,027	(294)	3,068	(445)	3,400	—	3,400	50	\$440
RFB	50 (2)	40 (1½)	1,503	(218)	2,275	(330)	3,400	—	3,400	52	520
RFC	65 (2½)	50 (2)	1,772	(257)	2,689	(390)	3,400	—	3,400	59	548
RFD	80 (3)	65 (2½)	1,386	(201)	2,103	(305)	3,000	—	3,000	62	601
RFE	100 (4)	80 (3)	931	(135)	1,413	(205)	2,900	—	2,900	73	657
RFF	125 (5)	100 (4)	910	(132)	1,379	(200)	2,900	—	2,900	79	713
RFG	150 (6)	125 (5)	1,048	(152)	1,586	(230)	2,800	—	2,800	115	886
RGA	40 (1½)	32 (1¼)	1,593	(231)	2,413	(350)	3,400	—	3,400	61	\$554
RGB	50 (2)	40 (1½)	1,076	(156)	1,613	(234)	3,400	—	3,400	65	608
RGC	65 (2½)	50 (2)	1,000	(145)	1,517	(220)	3,000	—	3,000	76	662
RGD	80 (3)	65 (2½)	889	(129)	1,344	(195)	3,000	—	3,000	76	708
RGE	100 (4)	80 (3)	924	(134)	1,400	(203)	2,900	—	3,000	90	746
RGF	125 (5)	100 (4)	862	(125)	1,310	(190)	2,900	—	3,000	92	777
RGG	125 (5)	125 (5)	1,186	(172)	1,793	(260)	2,600	—	2,600	115	955
RGH	150 (6)	150 (6)	793	(115)	1,207	(175)	2,200	—	2,200	132	988
RHB	50 (2)	40 (1½)	1,317	(191)	2,000	(290)	3,000	—	3,000	80	\$680
RHC	65 (2½)	50 (2)	1,317	(191)	2,000	(290)	3,000	—	3,000	88	744
RHD	80 (3)	65 (2½)	1,317	(191)	2,000	(290)	2,900	—	2,900	90	780
RHE	100 (4)	80 (3)	1,103	(160)	1,655	(240)	2,900	—	2,900	108	842
RHF	125 (5)	100 (4)	1,103	(160)	1,655	(240)	2,900	—	2,900	108	920
RHG	150 (6)	125 (5)	958	(139)	1,448	(210)	2,200	—	2,200	167	1,059
RHH	150 (6)	150 (6)	731	(106)	1,103	(160)	2,100	—	2,100	188	1,094
RJD	100 (4)	65 (2½)	1,117	(162)	1,689	(245)	2,500	2,500	2,260	162	\$1,437
RJE	100 (4)	80 (3)	931	(135)	1,413	(205)	2,500	2,500	2,260	166	1,474
RJF	125 (5)	100 (4)	1,158	(168)	1,758	(255)	2,500	2,500	2,260	171	1,514
RJG	150 (6)	125 (5)	931	(135)	1,413	(205)	2,300	2,300	2,300	193	1,551
RJH	150 (6)	150 (6)	841	(122)	1,276	(185)	2,020	2,020	2,020	204	1,591
RJJ	200 (8)	150 (6)	758	(110)	1,103	(160)	2,000	2,000	2,000	257	1,724
RPE	100 (4)	80 (3)	965	(140)	1,462	(212)	2,020ZF 2,250SG	2,250	2,250	205	\$1,646
RPF	125 (5)	100 (4)	1,020	(148)	1,551	(225)	2,020ZF 2,250SG	2,250	2,050	214	1,687

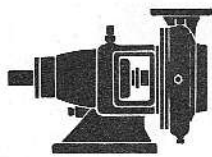
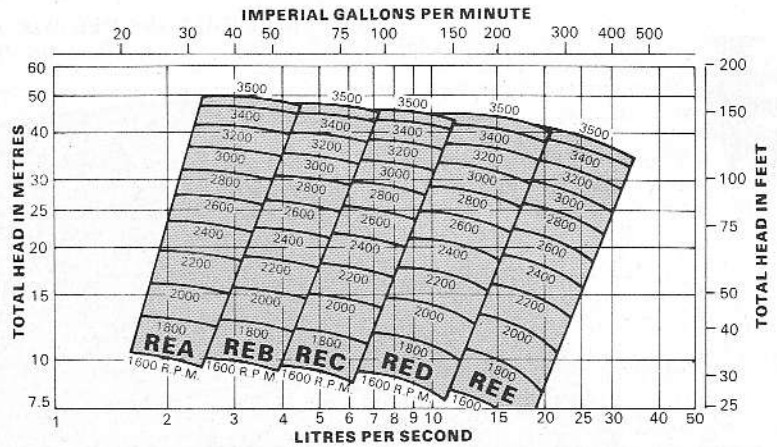


SOUTHERN CROSS 'R' SERIES PEDESTAL MOUNTED CENTRIFUGAL PUMP SELECTION TABLES—MULTI-SPEED



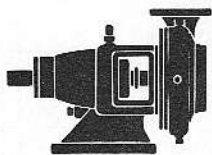
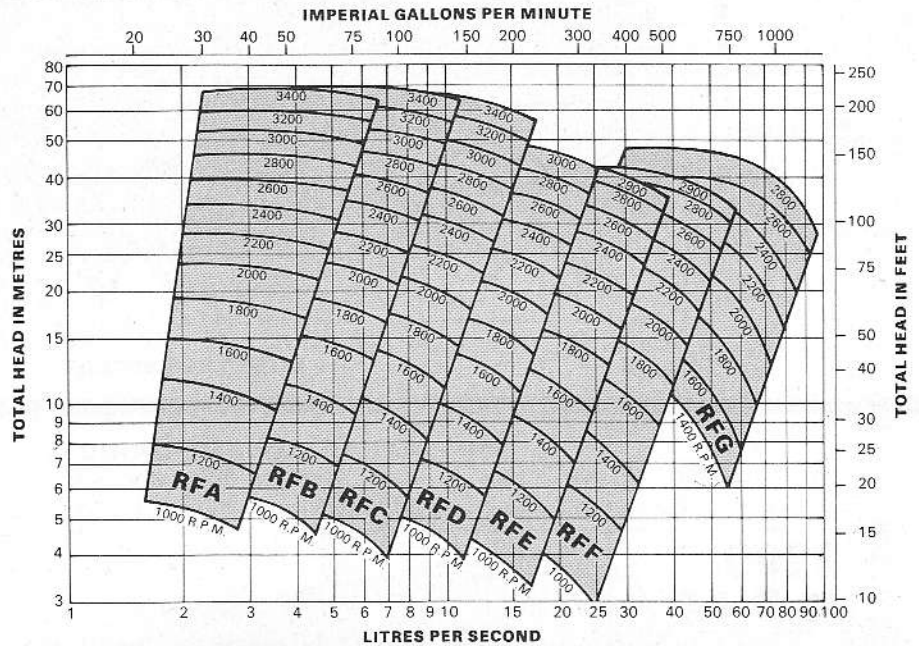
'RE'

159 mm (6 $\frac{1}{4}$ inch)
Diameter
Impeller



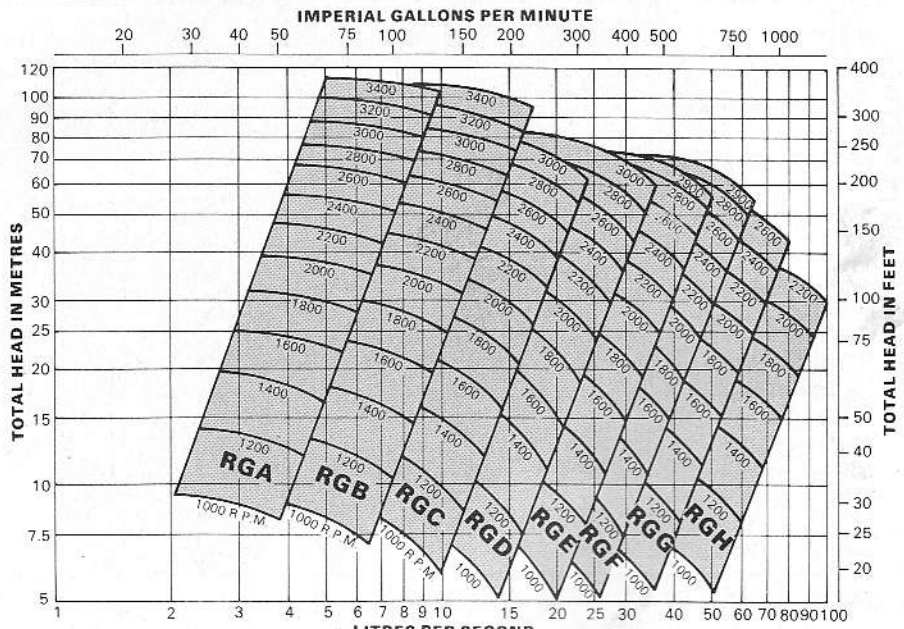
'RF'

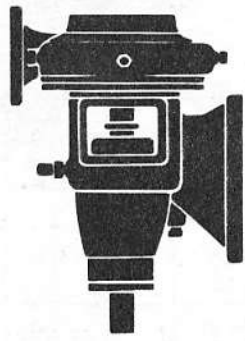
191 mm (7 $\frac{1}{2}$ inch)
Diameter
Impeller
RFG 213 mm diam
(8 $\frac{3}{8}$ inch)



'RG'

238 mm (9 $\frac{3}{8}$ inch)
Diameter
Impeller





'RF'

191 mm (7½ inch)

Diameter

Impeller

RFG 213 mm diam

(8⅜ inch)

