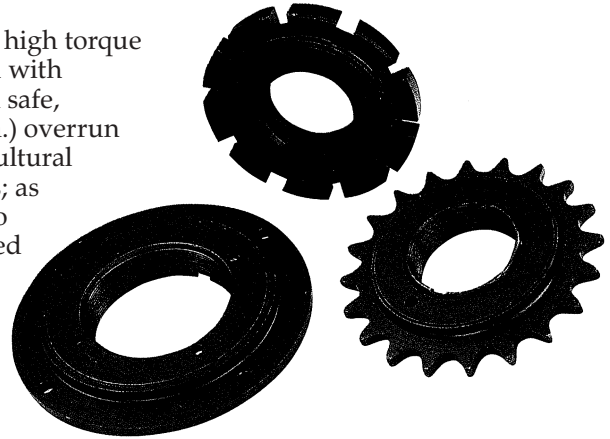


# Industrial Ratchet Freewheels and Adaptors



Industrial Ratchet Freewheels provide positive one-way drive with high torque capacity within a small unit. A ratchet and pawl mechanism is used with materials and heat treatment selected for a long operating life, with safe, positive transmission. IRF's are suited to low speed (up to 150 r.p.m.) overrun applications where shock loads may be encountered, such as Agricultural machinery. Standard stock units are available in two configurations; as standard sprocket for 1/2 inch pitch chains, or with a drilled flange to fit conveyor rollers, pulleys, or wheels. Standard units have threaded bore to cycle standards, but a range of Adaptors enable fitting to keyed shafting. IRF clutches are also stocked in part-assembled condition for reworking to custom design, including finish parallel bore and keyseat. Many special Industrial Ratchet Freewheels have been manufactured to meet customers' requirements with torques over 1,000 Nm.

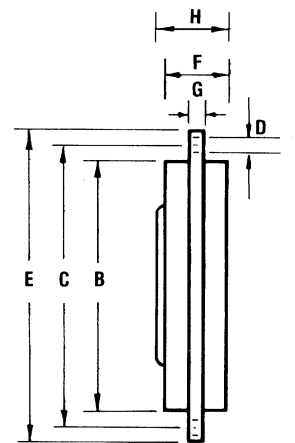


## I.R.F. Clutches with external mounting flange

Dimensions in mm

Freewheel Size	Threaded Bore Diameter (1)		Shroud Diameter B	P.C.D. Holes C	Hole Diameter D	Outside Diameter E	Body Width F	Flange Width G	Overall Width H	Torque Capacity Nm	Standard Adaptor Size
	ins	mm									
M.P.F.	0.970	24.64	46.7	54.8	4.9	62.5	11.4	2.9	12.8	42	F11
R.S.J.	1.370	34.80	62.7	69.8	5.2	77.8	13.7	2.9	15.2	150	A211
N.V.F.	2.000	50.80	82.5	94.4	4.9	105.0	13.7	4.4	15.9	206	A213

(1) M.P.F. Clutch bore threaded 20 T.P.I. B.S.W. R.H. Form. R.S.J. and N.V.F. threaded 24 T.P.I. C.E.I. R.H. Form.



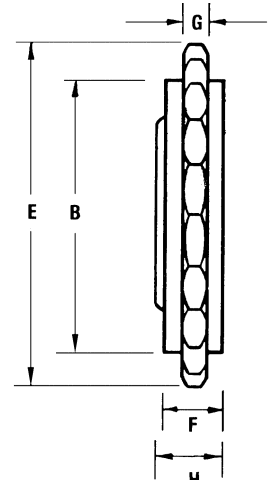
I.R.F. Flange

## I.R.F. Sprockets to suit standard BS Series Chains

Dimensions in mm

Freewheel Size	Chain Size	No. Teeth	Threaded Bore Diameter (1)		Shroud Dia. B	P.C.D. of Sprocket	O.D. Sprocket E	Tooth Width G	Body Width F	Overall Torque H	Nominal Torque Nm	Standard Adaptor Size
			ins	mm								
F10B 14	081	14	0.970	24.64	46.7	57.1	64.8	2.9	11.4	12.8	42	F11
A10A 16	081	16	1.370	34.80	54.8	65.1	71.5	2.9	13.7	16.0	106	A211
A10A 17	081	17	1.370	34.80	54.8	69.1	76.0	2.9	13.7	16.0	106	A211
A10A 18	081	18	1.370	34.80	62.2	73.1	78.8	2.9	13.7	16.0	150	A211
A10A 19	081	19	1.370	34.80	65.5	77.2	82.3	2.9	13.7	16.0	150	A211
A10A 20	081	20	1.370	34.80	65.5	81.2	86.4	2.9	13.7	16.0	150	A211
A10A 21	081	21	1.370	34.80	65.5	85.2	92.2	2.9	13.7	16.0	150	A211
A10A 22	081	22	1.370	34.80	65.5	89.2	96.1	2.9	13.7	16.0	150	A211
A10A 23	081	23	1.370	34.80	65.5	93.3	100.1	2.9	13.7	16.0	150	A211
A10A 24	081	24	1.370	34.80	65.5	97.3	103.1	2.9	13.7	16.0	150	A211
A10A 25	081	25	1.370	34.80	65.5	101.3	108.2	2.9	13.7	16.0	150	A211
A10A 26	081	26	1.370	34.80	65.5	105.3	112.3	2.9	13.7	16.0	150	A211
A10B 16	083	16	1.370	34.80	54.8	65.1	71.5	4.4	13.7	16.0	106	A211
A10B 17	083	17	1.370	34.80	54.8	69.1	76.0	4.4	13.7	16.0	106	A211
A10B 18	083	18	1.370	34.80	62.2	73.1	80.0	4.4	13.7	16.0	150	A211
A10B 19	083	19	1.370	34.80	65.5	77.2	84.1	4.4	13.7	16.0	150	A211
A10B 20	083	20	1.370	34.80	65.5	81.2	88.1	4.4	13.7	16.0	150	A211
A10B 21	083	21	1.370	34.80	65.5	85.2	92.2	4.4	13.7	16.0	150	A211
A10B 22	083	22	1.370	34.80	65.5	89.2	96.1	4.4	13.7	16.0	150	A211
A10B 23	083	23	1.370	34.80	65.5	93.3	100.1	4.4	13.7	16.0	150	A211
A10B 24	083	24	1.370	34.80	65.5	97.3	104.1	4.4	13.7	16.0	150	A211
A10B 25	083	25	1.370	34.80	65.5	101.3	108.2	4.4	13.7	16.0	150	A211
A10B 26	083	26	1.370	34.80	65.5	105.3	112.3	4.4	13.7	16.0	150	A211
H.D. 22	083	22	1.625	41.28	78.5	89.2	96.1	4.4	13.7	16.0	195	A212
H.D. 24	083	24	2.000	50.80	82.5	97.3	104.1	4.4	13.7	16.0	206	A213
A08B 19	08B-1	19	1.370	34.80	63.2	77.2	82.3	7.1	13.7	16.0	150	A211
A08B 20	08B-1	20	1.370	34.80	67.3	81.2	86.4	7.1	13.7	16.0	150	A211
A08B 25	08B-1	25	1.370	34.80	71.4	101.3	106.4	7.1	13.7	16.0	150	A211

(1) All clutches except F10B are with 24 T.P.I. C.E.I.R.H. Threaded Form. F10B Clutch has 20 T.P.I. B.S.W. R.H. Thread.



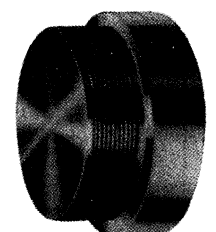
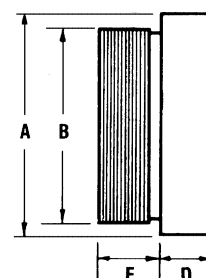
I.R.F. Sprocket

## Steel Adaptors for Industrial Ratchet Freewheels

These adaptors enable easy assembly of standard IRF's to conventional keyed shafting.

Adaptor Size	Top Dia. A	C.E.I. 24 T.P.I. Thread B Dia.		Flange D	Width E
	mm	ins	mm	mm	mm
F11	27.00	0.966 (1)	24.53	11.84	8.73
A211	41.28	1.370	34.80	12.70	14.29
A212	47.63	1.625	41.28	12.70	14.29
A213	57.15	2.000	50.80	12.70	14.29

(1) Adaptor F11 has 20 T.P.I. B.S.W. Thread.



A211/A212/A213

Adaptors are solid bore, (except F11 which has 15mm plain bore) and can be finished bored and keyed to customers specifications. Max. bore = 0.6B.

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