

# Borewell Submersibles (TRF 5H)

TARO "TRF 5H Series" - Three/Single Phase Radial Flow Submersible Pumpsets for 4" Borewells  
 Approximate performance values of TRF 5H Series at 440/220 V (-15% to +6%), 2850 rpm, 60 Hz  
 AC Power Supply

Pump Type	Motor Type	Connection	Motor rating		Stages	Pipe size (mm)	CAPACITY								FL Current (A)
							Gpm	3.3	4.0	4.6	5.0	6.6	7.9	9.2	
							l/m	15	18	21	23	30	36	42	
							M <sup>3</sup> /hr	0.9	1.1	1.3	1.4	1.8	2.2	2.5	
							l/s	0.25	0.30	0.35	0.38	0.5	0.6	0.7	
TRF 513H	TF 007	DOL	0.75	1	13	82.6	80.0	79.3	78.0	67.0	56.6	44.9	2.75		
TRF 516H	TF 011	DOL	1.1	1.5	16	102	98.4	97.6	96.0	82.4	69.6	55.2	3.25		
TRF 520H	TF 011	DOL	1.1	1.5	20	127	123	122	120	103	87.0	69.0	3.25		
TRF 525H	TF 015	DOL	1.5	2	25	159	154	153	150	129	109	86.3	4.5		
TRF 526H	TF 015	DOL	1.5	2	26	165	160	159	156	134	113	89.7	4.5		
TRF 530H	TF 015	DOL	1.5	2	30	191	185	183	180	155	131	104	4.5		
TRF 540H	TF 022	DOL	2.2	3	40	254	246	244	240	206	174	138	6.5		
TRF 506HS	SF 003	-	0.37	0.5	6	38.1	36.9	36.6	36.0	30.9	26.1	20.7	4.5		
TRF 507HS	SF 003	-	0.37	0.5	7	44.5	43.1	42.7	42.0	36.1	30.5	24.2	4.5		
TRF 510HS	SF 005	-	0.55	0.75	10	63.5	61.5	61.0	60.0	51.5	43.5	34.5	5.4		
TRF 513HS	SF 007	-	0.75	1	13	82.6	80.0	79.3	78.0	67.0	56.6	44.9	6		
TRF 516HS	SF 011	-	1.1	1.5	16	102	98.4	97.6	96.0	82.4	69.6	55.2	9.5		
TRF 520HS	SF 011	-	1.1	1.5	20	127	123	122	120	103	87.0	69.0	9.5		
TRF 525HS	SF 015	-	1.5	2	25	159	154	153	150	129	109	86.3	13		
TRF 526HS	SF 015	-	1.5	2	26	165	160	159	156	134	113	89.7	13		
TRF 530HS	SF 015	-	1.5	2	30	191	185	183	180	155	131	104	13		
TRF 540HS	SF 022	-	2.2	3	40	254	246	244	240	206	174	138	18		

Maximum outer diameter: 98 mm

'L' series is also available in SF 005, SF 007 & SF 011

### PRODUCT TYPE KEY

T R F 5 13 H - Taro, Radial flow, Four inch, 5 series, 13 Stages (High head)

T R F 5 30 H - Taro, Radial flow, Four inch, 5 series, 30 Stages (High head)

T F 007 - Three phase, Four inch motor (007 Power code)

S F 015 - Single phase, Four inch motor (015 Power code)

TRF 5H/1.1/05/04

# Borewell Submersibles (TRF 4/5)

TARO "TRF 4 Series" - Three Phase Radial Flow Submersible Pumpsets for 4" Borewells  
 Approximate performance values of TRF 4 Series at 220 V (-15% to +6%), 2850 rpm, 60 Hz AC Power Supply

Pump Type	Motor Type	Connection	Motor rating kW HP		Stages	Pipe size (mm)	CAPACITY								FL Current (A)	
							Gpm	2.0	2.2	2.6	2.9	3.3	3.7	4.0		4.6
							l/m	9	10	12	13	15	17	18		21
							M <sup>3</sup> /hr	0.5	0.6	0.7	0.8	0.9	1.0	1.1		1.3
							l/s	0.15	0.17	0.20	0.22	0.25	0.28	0.30		0.35
TRF 415S	SF 005		0.55	0.75	15	30	69.0	66.0	63.0	60.0	52.5	46.0	42.5	28.4	5.4	
TRF 418S	SF 005		0.55	0.75	18	30	82.8	79.2	75.6	72.0	63.0	55.8	50.4	34.2	5.4	

TARO "TRF 5 Series" - Three /Single Phase Radial Flow Submersible Pumpsets for 4" Borewells  
 Approximate performance values of TRF 5 Series at 440/220 V (-15% to +6%), 2850 rpm, 60 Hz AC Power Supply

Pump Type	Motor Type	Connection	Motor rating kW HP		Stages	Pipe size (mm)	CAPACITY						FL Current (A)	
							Gpm	2.6	3.3	4.0	4.6	5.3		6.6
							l/m	12	15	18	21	24		30
							M <sup>3</sup> /hr	0.7	0.9	1.1	1.3	1.4		1.8
							l/s	0.2	0.25	0.3	0.35	0.4		0.5
TRF 518 *	TF 007	DOL	0.75	1	18	30	90.0	86.4	81.0	73.8	68.4	50.4	2.75	
TRF 521 *	TF 011	DOL	1.1	1.5	21	30	105	101	94.5	86.1	79.8	58.8	3.25	
TRF 525 *	TF 011	DOL	1.1	1.5	25	30	125	120	113	102.5	95.0	70.0	3.25	
TRF 530 *	TF 015	DOL	1.5	2	30	30	150	144	135	123	114	84.0	4.5	
TRF 508S	SF 003	-	0.37	0.5	8	30	40	38.4	36.0	32.8	30.4	22.4	4.5	
TRF 510S *	SF 005	-	0.55	0.75	10	30	50	48.0	45.0	41.0	38.0	28.0	5.4	
TRF 513S	SF 005	-	0.55	0.75	13	30	65	62.4	58.5	53.3	49.4	36.4	5.4	
TRF 518S *	SF 007	-	0.75	1	18	30	90	86.4	81.0	73.8	68.4	50.4	6	
TRF 521S *	SF 011	-	1.1	1.5	21	30	105	101	94.5	86.1	79.8	58.8	9.5	
TRF 525S *	SF 011	-	1.1	1.5	25	30	125	120	113	102.5	95.0	70.0	9.5	
TRF 530S *	SF 015	-	1.5	2	30	30	150	144	135	123	114	84.0	13	

Maximum outer diameter: 98 mm

'L' series is also available in SF 007 & SF 011

### PRODUCT TYPE KEY

TRF 4 15 - TarO, Radial flow, Four inch, 4 series, 15 Stages  
 TRF 5 21 - TarO, Radial flow, Four inch, 5 series, 21 Stages

TF 011 - Three phase, Four inch motor (011 Power code)  
 SF 011 - Single phase, Four inch motor (011 Power code)

TRF 4-5/1.2/01/04

# Borewell Submersibles (TRF & TBRF 10/15)

RYOBA ADVANTEX

TARO "TRF 10/15 series" - Three Phase Radial Flow Submersible Pumpsets for 4" Borewells  
 Approximate performance values of TRF 10/15 series at 440V (-15% to +6%), 2850 rpm, 60 Hz AC Power Supply

Pump Type	Motor rating	Connection	Motor rating		Stages	Pipe size (mm)	CAPACITY															FL Current (A)
							Gpm	7.9	9.2	10.6	11.9	13.2	15.8	17.2	18.5	19.8	21.1	23.8	27.7	29.0		
							l/m	36	42	48	54	60	72	78	84	90	96	108	126	132		
							M <sup>3</sup> /hr	2.2	2.5	2.9	3.2	3.6	4.3	4.7	5.0	5.4	5.8	6.5	7.6	7.9		
							l/s	0.6	0.7	0.8	0.9	1.0	1.2	1.3	1.4	1.5	1.6	1.8	2.1	2.2		
TRF 1010 *	TF 007	DOL	0.75	1	10	51.0	50.0	48.0	45.0	42	34.5	31.0	25.5							2.75		
TRF 1015 *	TF 011	DOL	1.1	1.5	15	76.5	75.0	72.0	67.5	63	51.8	46.5	38.2							3.25		
TRF 1020 *	TF 015	DOL	1.5	2	20	102	100	96	90	84	69.0	62.0	51.0							4.5		
TRF 1025	TF 022	DOL	2.2	3	25	128	125	120	113	105	86.3	77.5	63.8							6.5		
TRF 1030 *	TF 022	DOL	2.2	3	30	153	150	144	135	126	104	93.0	76.5							6.5		
TRF 1035 *	TF 030	DOL	3	4	35	179	175	168	158	147	121	109	89.3							8.5		
TRF 1040 * #	TF 030	DOL	3	4	40	204	200	192	180	168	138	124	102							8.5		
TBRF 1050 * #	TF 037	DOL	3.7	5	50	255	250	240	225	210	173	155	128							10		
TBRF 1060	TF 045H	DOL	4.5	6	60	306	300	288	270	252	207	186	153							12		
TBRF 1075	TF 056H	DOL	5.5	7.5	75	383	375	360	338	315	259	233	191							14.5		
TRF 1517 *	TF 015	DOL	1.5	2	17				87.6	85.0	79.1	75.7	72.6	71.4	65.5	55.3	40.8	35.9	4.5			
TRF 1525 *	TF 022	DOL	2.2	3	25				129	125	116	111	107	105	96.3	81.3	60.0	52.8	6.5			
TRF 1532 *	TF 030	DOL	3.0	4	32				165	160	149	142	137	134	123	104	76.8	67.5	8.5			
TBRF 1537 *	TF 037	DOL	3.7	5	37				191	185	172	165	158	155	142	120	88.8	78.1	10			
TBRF 1545	TF 045H	DOL	4.5	6	45				232	225	209	200	192	189	173	146	108	95.0	12			
TBRF 1556	TF 056H	DOL	5.5	7.5	56				288	280	260	249	239	235.2	216	182	134	118	14.5			

HEAD VALUES IN METERS

D O L - Direct On Line

Maximum outer diameter: 98 mm

TRF 10 / 15 series are also available in Box type (TBRF 10 / 15)

# - 'F' series with 40 mm delivery D O L - Direct On Line

'L' series is also available in SF 005, SF 007 & SF 012

**PRODUCT TYPE KEY**

T B R F 10 15 - Taro, Box type, Radial flow, Four inch, 10 series, 15 Stages  
 T F 011 - Three phase, Four inch motor (011 Power code)

T R F 15 37 - Taro, Radial flow, Four inch, 15 series, 37 stages  
 S F 015 - Single phase, Four inch motor (015 Power code)

TRF&TBRF 10-15/1.2/05/04

# Borewell Submersibles (TRF & TBRF 10/15)

TARO "TRF 10/15 series" - Three Phase Radial Flow Submersible Pumpsets for 4" Borewells  
 Approximate performance values of TRF 10/15 series at 440V (-15% to +6%), 2850 rpm, 60 Hz AC Power Supply

Pump Type	Motor rating	Connection	Motor rating		Stages	Pipe size (mm)	CAPACITY													FL Current (A)	
							Gpm	7.9	9.2	10.6	11.9	13.2	15.8	17.2	18.5	19.8	21.1	23.8	27.7		29.0
							l/m	36	42	48	54	60	72	78	84	90	96	108	126		132
							M <sup>3</sup> /hr	2.2	2.5	2.9	3.2	3.6	4.3	4.7	5.0	5.4	5.8	6.5	7.6		7.9
							l/s	0.6	0.7	0.8	0.9	1.0	1.2	1.3	1.4	1.5	1.6	1.8	2.1		2.2
TRF 1005S *	SF 003	0.37	0.5	5	30	25.5	25.0	24.0	22.5	21.0	17.3	15.5	12.8					4.5			
TRF 1007S *	SF 005	0.55	0.75	7		35.7	35.0	33.6	31.5	29.4	24.2	21.7	17.9					5.4			
TRF 1008S *	SF 005	0.55	0.75	8		40.8	40.0	38.4	36.0	33.6	27.6	24.8	20.4					5.4			
TRF 1010S *	SF 007	0.75	1	10		51.0	50.0	48.0	45.0	42.0	34.5	31.0	25.5					6			
TRF 1015S *	SF 011	1.1	1.5	15		76.5	75.0	72.0	67.5	63.0	51.8	46.5	38.2					9.5			
TRF 1020S *	SF 015	1.5	2	20		102	100	96.0	90.0	84.0	69.0	62.0	51.0					13			
TRF 1030S *	SF 022	2.2	3	30		153	150	144	135	126	104	93.0	76.5					18			
TRF 1517S	SF 015	1.5	2	17		40				87.6	85.0	79.1	75.7	72.6	71.4	65.5	55.3	40.8	35.9	13	
TRF 1525S	SF 022	2.2	3	25						129	125	116	111	107	105	96.3	81.3	60.0	52.8	18	

Maximum outer diameter: 98 mm

TRF 10 / 15 series are also available in Box type (TBRF 10 / 15)

# - 'F' series with 40 mm delivery D O L - Direct On Line

'L' series is also available in SF 005, SF 007 & SF 012

**PRODUCT TYPE KEY**

T B R F 10 15 - Taro, Box type, Radial flow, Four inch, 10 series, 15 Stages

T R F 15 37 - Taro, Radial flow, Four inch, 15 series, 37 stages

T F 011 - Three phase, Four inch motor (011 Power code)

S F 015 - Single phase, Four inch motor (015 Power code)

# Borewell Submersibles (TRF & TBRF 20/TMF 50)

TARO "TRF 20/TMF 50 Series" - Three Phase Radial/Mixed Flow Submersible Pumpsets for 4" Borewells Approximate performance values of TRF 20/TMF 50 Series at 440V (-15% to +6%), 2850 rpm, 60 Hz AC Power Supply

Pump Type	Motor Type	Connection	Motor rating kW HP		Stages	Pipe size (mm)	CAPACITY											FL Current (A)	
							Gpm	17.2	18.5	21.1	23.8	27.7	31.7	35.6	44.9	55.4	66.0		72.6
							l/m	78	84	96	108	126	144	162	204	252	300		330
							M <sup>3</sup> /hr	4.7	5.0	5.8	6.5	7.6	8.6	9.7	12.2	15.1	18.0		19.8
						l/s	1.3	1.4	1.6	1.8	2.1	2.4	2.7	3.4	4.2	5.0	5.5		
TRF 2005 *	TF 007	DOL	0.75	1	5	40	28.0	27.0	26.0	24.0	20.0	13.0	9.0					2.75	
TRF 2007 *	TF 011	DOL	1.1	1.5	7		39.2	37.8	36.4	33.6	28.0	18.2	12.6					3.25	
TRF 2010 *	TF 015	DOL	1.5	2	10		56.0	54.0	52.0	48.0	40.0	26.0	18.0					4.5	
TRF 2015 *	TF 022	DOL	2.2	3	15		84.0	81.0	78.0	72.0	60.0	39.0	27.0					6.5	
TRF 2017	TF 022	DOL	2.2	3	17		95.2	91.8	88.4	81.6	68.0	44.2	30.6					6.5	
TRF 2020 *	TF 030	DOL	3	4	20		112	108	104	96.0	80.0	52.0	36.0					8.5	
TRF 2025 *	TF 037	DOL	3.7	5	25		140	135	130	120	100	65.0	45.0					10	
TBRF 2030	TF 045H	DOL	4.5	6	30		168	162	156	144	120	78.0	54.0					12	
TBRF 2037	TF 056H	DOL	5.5	7.5	37		207	200	192	177.6	148	96.2	66.6					14.5	
TMF 5005	TF 011	DOL	1.1	1.5	5		50					22.0	21.0	20.5	20.0	18.0	13.0	9.5	6.0
TMF 5006	TF 015	DOL	1.5	2	6					26.4	25.2	24.6	24.0	21.6	15.6	11.4	7.2	4.5	
TMF 5009	TF 022	DOL	2.2	3	9					39.6	37.8	36.9	36.0	32.4	23.4	17.1	10.8	6.5	
TMF 5012	TF 030	DOL	3	4	12					52.8	50.4	49.2	48.0	43.2	31.2	22.8	14.4	8.5	
TMF 5015 #	TF 037	DOL	3.7	5	15					66.0	63.0	61.5	60.0	54.0	39.0	28.5	18.0	10	

D O L - Direct On Line

TRF 20 series is also available in Box type (TBRF 20)

# - 65 mm delivery size

Maximum outer diameter: 98 mm

D O L - Direct On Line

'L' series is also available in SF 005 (10 series), SF 007 & SF 011

## PRODUCT TYPE KEY

T R F 20 25 - Taro, Radial flow, Four inch, 20 series, 25 stage pump

T F 011 - Three phase, Four inch motor (011 Power code)

T M F 50 15 - Taro, Mixed flow, Four inch, 50 series, 15 stage pump

S F 022 - Single phase, Four inch motor (022 Power code)

TRF&TBRF 20-TMF-50/1.2/05/04

# Borewell Submersibles (TRF & TBRF 20/TMF 50)

TARO "TRF/TMF Series" - Single Phase Radial/Mixed Flow Submersible Pumpsets for 4" Borewells  
 Approximate performance values of TRF 5/10/20 & TMF 50 Series at 220 V (-15% to +6%),  
 2850 rpm, 60 Hz AC Power Supply (Contd...)

Pump Type	Motor Type	Motor rating		Stages	Pipe size (mm)	CAPACITY											FL Current (A)			
						Gpm	17.2	18.5	21.1	23.8	27.7	31.7	35.6	44.9	55.4	66.0		72.6		
						l/m	78	84	96	108	126	144	162	204	252	300		330		
						M <sup>3</sup> /hr	4.7	5.0	5.8	6.5	7.6	8.6	9.7	12.2	15.1	18.0		19.8		
						l/s	1.3	1.4	1.6	1.8	2.1	2.4	2.7	3.4	4.2	5.0		5.5		
TRF 2005S *	SF 007	0.75	1	5	40	28.0	27.0	26.0	24.0	20.0	13.0	9.0					6			
TRF 2007S	SF 011	1.1	1.5	7		39.2	37.8	36.4	33.6	28.0	18.2	12.6					9.5			
TRF 2010S *	SF 015	1.5	2	10		56.0	54.0	52.0	48.0	40.0	26.0	18.0					13			
TRF 2015S *	SF 022	2.2	3	15		84.0	81.0	78.0	72.0	60.0	39.0	27.0					18			
TRF 2017S	SF 022	2.2	3	17		95.2	91.8	88.4	81.6	68.0	44.2	30.6					18			
TMF 5005S	SF 011	1.1	1.5	5		50						22.0	21.0	20.5	20.0	18.0	13.0	9.5	6.0	9.5
TMF 5006S	SF 015	1.1	2	6								26.4	25.2	24.6	24.0	21.6	15.6	11.4	7.2	13
TMF 5009S #	SF 022	2.2	3	9								39.6	37.8	36.9	36.0	32.4	23.4	17.1	10.8	18

TRF 20 series is also available in Box type (TBRF 20)

# - 65 mm delivery size

Maximum outer diameter: 98 mm

D O L - Direct On Line

'L' series is also available in SF 005 (10 series), SF 007 & SF 011

## PRODUCT TYPE KEY

T R F 20 25 - Taro, Radial flow, Four inch, 20 series, 25 stage pump

T M F 50 15 - Taro, Mixed flow, Four inch, 50 series, 15 stage pump

T F 011 - Three phase, Four inch motor (011 Power code)

S F 022 - Single phase, Four inch motor (022 Power code)

TRF&TBRF 20-TMF-50/1.2/05/04