

xylem

# AC Fire Pump

General Information and Engineering Data



**"H" Prefix indicates high pressure casing**

Pump	Size	3x2x11F-S	6x4x9F	H6x4x9F	6x4x10F-M	H6x4x10F-M
	Type	8100	8100	8100	8100	8100
Stages		1	1	1	1	1

**Casing design**

Flange rating	Suction	125	125	250	125	250
	Discharge	125	125	250	125	250
Stages		Cast iron ASTM A48 class 35	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	200	375	200	450
Max suction pressure (PSIG)		75	100	200	100	200
Max hydrostatic pressure (PSIG)			375	563	375	675
Casing wall thickness		0.38	0.44	0.44	0.5	0.5

**Stuffing box design**

Bore	2.62	2.62	2.62	3.25	3.25
Depth	2.56	2.56	2.56	3.50	3.50
Packing: # rings / size square	5 / .38	5 / .38	5 / .38	5 / .50	5 / .50
Seal cage width	0.50	0.50	0.50	0.75	0.75
Shaft sleeve. O.D.	1.88	1.88	1.88	2.25	2.25

**Impeller design**

# of vanes	6	6	6	6	6
Inlet area (IN <sup>2</sup> )	7.70	5.90	5.90	15.90	15.90
Max diameter	11.00	9.80	9.80	12.00	12.00
Min diameter	5.50	6.00	6.00	6.50	6.50
Max sphere	0.25	0.44	0.44	0.50	0.50
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	3.60	2.40	2.40	2.90	2.90
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		1.686	1.687	1.687	1.937	1.937
Dia thru sleeve		1.499	1.499	1.499	1.874	1.874
Dia at coupling		1.125	1.125	1.125	1.375	1.375
Shaft span BRG to BRG		20.90	22.00	22.00	25.25	25.25
Ball bearing	In board BRG #	6206	6206	6206	6208	6208
	Dia thru BRG	1.1816	1.1816	1.1816	1.5753	1.5753
	Outboard BRG #	5206	5206	5206	5307	5307
	Dia thru BRG	1.1160	1.1816	1.1816	1.3785	1.3785
Frame number		F20-A4	F20-G4	F20-G4	F20-B4	F20-B4
Instruction book		AC6102	AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	6x4x11F	H6x4x11F	6x4x12F-M	H6x4x12F-M	6x6x9F	H6x6x9F
	Type	8100	8100	8100	8100	8100	8100
Stages		1	1	1	1	1	1

**Casing design**

Flange rating	Suction	125	250	125	250	125	250
	Discharge	125	250	125	250	125	250
Stages		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	400	200	375	200	375
Max suction pressure (PSIG)		100	200	100	200	100	200
Max hydrostatic pressure (PSIG)		375	600	338	563	375	563
Casing wall thickness		0.5	0.5	0.44	0.44	0.44	0.44

**Stuffing box design**

Bore	3.25	3.25	2.62	2.62	2.62	2.62
Depth	3.50	3.50	2.56	2.56	2.56	2.56
Packing: # rings / size square	5 / .50	5 / .50	5 / .38	5 / .38	5 / .38	5 / .38
Seal cage width	0.75	0.75	0.50	0.50	0.50	0.50
Shaft sleeve, O.D.	2.25	2.25	1.88	1.88	1.88	1.88

**Impeller design**

# of vanes	6	6	6	6	6	6
Inlet area (IN <sup>2</sup> )	19.60	19.60	10.20	10.20	5.90	5.90
Max diameter	11.60	11.60	13.70	13.70	9.80	9.80
Min diameter	6.50	6.50	7.50	7.50	6.50	6.50
Max sphere	0.70	0.70	0.50	0.50	0.48	0.48
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	3.00	3.00	3.00	3.00	2.50	2.50
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		1.937	1.937	1.687	1.687	1.687	1.687
Dia thru sleeve		1.874	1.874	1.499	1.499	1.499	1.499
Dia at coupling		1.375	1.375	1.125	1.125	1.125	1.125
Shaft span BRG to BRG		25.25	25.25	22.90	22.90	22.00	22.00
Ball bearing	In board BRG #	6208	6208	6206	6206	6206	6206
	Dia thru BRG	1.5753	1.5753	1.1816	1.1816	1.1816	1.1816
	Outboard BRG #	5307	5307	5206	5206	5206	5206
	Dia thru BRG	1.3785	1.3785	1.8160	1.8160	1.8160	1.8160
Frame number		F20-B4	F20-B4	F20-C4	F20-C4	F20-G4	F20-G4
Instruction book		AC6102	AC6102	AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	8x6x9F	H8x6x9F	8x6x12F-S	H8x6x12F-S
	Type	8100	8100	8100	8100
Stages		1	1	1	1

**Casing design**

Flange rating	Suction	125	250	125	250
	Discharge	125	250	125	250
Stages		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	375	200	375
Max suction pressure (PSIG)		100	200	100	200
Max hydrostatic pressure (PSIG)		375	563	338	563
Casing wall thickness		0.44	0.44	0.44	0.44

**Stuffing box design**

Bore	2.62	2.62	2.62	2.62
Depth	2.56	2.56	2.56	2.56
Packing: # rings / size square	5 / .38	5 / .38	5 / .38	5 / .38
Seal cage width	0.50	0.50	0.50	0.50
Shaft sleeve. O.D.	1.88	1.88	1.88	1.88

**Impeller design**

# of vanes	6	6	5	5
Inlet area (IN <sup>2</sup> )	12.00	12.00	27.00	27.00
Max diameter	9.80	9.80	12.80	12.80
Min diameter	6.50	6.50	7.00	7.00
Max sphere	0.64	0.64	0.72	0.72
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	2.60	2.60	3.60	3.60
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		1.687	1.687	1.687	1.687
Dia thru sleeve		1.499	1.499	1.499	1.499
Dia at coupling		1.125	1.125	1.125	1.125
Shaft span BRG to BRG		25.25	25.25	22.90	22.90
Ball bearing	In board BRG #	6206	6206	6206	6206
	Dia thru BRG	1.1816	1.1816	1.1816	1.1816
	Outboard BRG #	5206	5206	5206	5206
	Dia thru BRG	1.1816	1.1816	1.1816	1.1816
Frame number		F20-H4	F20-H4	F20-C4	F20-C4
Instruction book		AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	8x6x12F-M	H8x6x12F-M	8x6x13F	H8x6x13F	8x6x18F	H8x6x18F
	Type	8100	8100	8100	8100	8100	8100
Stages		1	1	1	1	1	1

**Casing design**

Flange rating	Suction	125	250	125	250	125	250
	Discharge	125	250	125	250	125	250
Stages		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	375	200	375	200	375
Max suction pressure (PSIG)		100	200	75	200	100	200
Max hydrostatic pressure (PSIG)		375	563	315	563	390	563
Casing wall thickness		0.5	0.44	0.44	0.44	0.44	0.44

**Stuffing box design**

Bore	3.25	3.25	3.25	3.25	3.25	3.25
Depth	3.50	3.50	3.50	3.50	3.50	3.50
Packing: # rings / size square	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50
Seal cage width	0.75	0.75	0.75	0.75	0.75	0.75
Shaft sleeve. O.D.	2.25	2.25	2.25	2.25	2.25	2.25

**Impeller design**

# of vanes	5	5	7	7	6	6
Inlet area (IN <sup>2</sup> )	19.60	19.60	44.40	44.40	18.30	18.30
Max diameter	11.60	11.60	13.10	13.10	17.20	17.20
Min diameter	6.50	6.50	7.00	7.00	13.00	13.00
Max sphere	0.70	0.70	1.00	1.00	0.70	0.70
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	3.00	3.00	5.30	5.30	18.00	18.00
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		1.937	1.937	1.937	1.937	1.937	1.937
Dia thru sleeve		1.874	1.874	1.874	1.874	1.874	1.874
Dia at coupling		1.375	1.375	1.375	1.375	1.375	1.375
Shaft span BRG to BRG		25.25	25.25	27.25	27.25	27.25	27.25
Ball bearing	In board BRG #	6208	6208	6208	6208	6208	6208
	Dia thru BRG	1.5753	1.5753	1.5753	1.5753	1.5753	1.5753
	Outboard BRG #	5307	5307	5307	5307	5307	5307
	Dia thru BRG	1.3785	1.3785	1.3785	1.3785	1.3785	1.3785
Frame number		F20-B4	F20-B4	F20-D4	F20-D4	F20-D4	F20-D4
Instruction book		AC6102	AC6102	AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	8x8x12F	H8x8x12F	8x8x17F	H8x8x17F	10x8x17F-S	H10x8x17F-S
	Type	8100	8100	8100	8100	8100	8100
Stages		1	1	1	1	1	1

**Casing design**

Flange rating	Suction	125	250	125	250	125	250
	Discharge	125	250	125	250	125	250
Stages		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	400	200	375	200	375
Max suction pressure (PSIG)		75	200	100	200	100	200
Max hydrostatic pressure (PSIG)		300	600	338	563	300	563
Casing wall thickness		0.44	0.44	0.44	0.44	0.5	0.5

**Stuffing box design**

Bore	3.25	3.25	3.75	3.75	3.75	3.75
Depth	3.50	3.50	3.62	3.62	3.62	3.62
Packing: # rings / size square	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50
Seal cage width	0.75	0.75	0.94	0.94	0.94	0.94
Shaft sleeve, O.D.	2.25	2.25	2.75	2.75	2.75	2.75

**Impeller design**

# of vanes	7	7	7	7	7	7
Inlet area (IN <sup>2</sup> )	61.90	61.90	40.20	40.20	57.50	57.50
Max diameter	12.80	12.80	17.70	17.70	17.00	17.00
Min diameter	8.00	8.00	10.00	10.00	10.00	10.00
Max sphere	1.13	1.13	0.98	0.98	0.97	0.97
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	8.10	8.10	17.00	17.00	20.70	20.70
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller	1.937	1.937	2.437	2.437	2.437	2.437
Dia thru sleeve	1.874	1.874	2.374	2.374	2.374	2.374
Dia at coupling	1.375	1.375	1.625	1.625	1.625	1.625
Shaft span BRG to BRG	27.25	27.25	29.90	29.90	29.90	29.90
Ball bearing	In board BRG #	6208	6208	6309	6309	6309
	Dia thru BRG	1.5753	1.5753	1.7500	1.7500	1.7500
	Outboard BRG #	5307	5307	5308	5308	5308
	Dia thru BRG	1.3785	1.3785	1.5753	1.5753	1.5753
Frame number	F20-D4	F20-D4	F20-E4	F20-E4	F20-E4	F20-E4
Instruction book	AC6102	AC6102	AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	10x8x17F-L	H10x8x17F-L	10x8x20F-S	H10x8x20F-S	10x8x20F-L	H10x8x20F-L
	Type	8100	8100	8100	8100	8100	8100
Stages		1	1	1	1	1	1

**Casing design**

Flange rating	Suction	125	250	125	250	125	250
	Discharge	125	250	125	250	125	250
Stages		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	375	200	375	200	375
Max suction pressure (PSIG)		100	200	100	200	100	200
Max hydrostatic pressure (PSIG)		300	555	300	555	300	555
Casing wall thickness		0.5	0.5	0.62	0.62	0.62	0.62

**Stuffing box design**

Bore	3.75	3.75	3.75	3.75	3.75	3.75
Depth	3.62	3.62	3.62	3.62	3.62	3.62
Packing: # rings / size square	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50
Seal cage width	0.94	0.94	0.94	0.94	0.94	0.94
Shaft sleeve, O.D.	2.75	2.75	2.75	2.75	2.75	2.75

**Impeller design**

# of vanes	5	5	6	6	6	6
Inlet area (IN <sup>2</sup> )	65.60	65.60	68.40	68.40	74.00	74.00
Max diameter	17.30	17.30	20.70	20.70	20.20	20.20
Min diameter	12.00	12.00	12.00	12.00	12.00	12.00
Max sphere	1.15	1.15	0.53	0.53	0.75	0.75
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	22.40	22.40	21.70	21.70	22.50	22.50
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		2.437	2.437	2.437	2.437	2.437
Dia thru sleeve		2.374	2.374	2.374	2.374	2.374
Dia at coupling		1.625	1.625	1.625	1.625	1.625
Shaft span BRG to BRG		29.90	29.90	29.90	29.90	29.90
Ball bearing	In board BRG #	6309	6309	6309	6309	6309
	Dia thru BRG	1.7500	1.7500	1.7500	1.7500	1.7500
	Outboard BRG #	5308	5308	5308	5308	5308
	Dia thru BRG	1.5753	1.5753	1.5753	1.5753	1.5753
Frame number		F20-E4	F20-E4	F20-E4	F20-E4	F20-E4
Instruction book		AC6102	AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	12x10x18F	H12x10x18F
	Type	8100	8100
Stages		1	1

**Casing design**

Flange rating	Suction	125	250
	Discharge	125	250
Stages		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		200	375
Max suction pressure (PSIG)		100	200
Max hydrostatic pressure (PSIG)		345	563
Casing wall thickness		0.56	0.56

**Stuffing box design**

Bore	3.75	3.75
Depth	3.62	3.62
Packing: # rings / size square	5 / .50	5 / .50
Seal cage width	0.94	0.94
Shaft sleeve. O.D.	2.75	2.75

**Impeller design**

# of vanes	8	8
Inlet area (IN <sup>2</sup> )	53.40	53.40
Max diameter	18.00	18.00
Min diameter	12.50	12.50
Max sphere	0.90	0.90
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	24.20	24.20
Wear ring clearance - diametrical	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		2.437	2.437
Dia thru sleeve		2.374	2.374
Dia at coupling		1.625	1.625
Shaft span BRG to BRG		29.90	29.90
Ball bearing	In board BRG #	6309	6309
	Dia thru BRG	1.7500	1.7500
	Outboard BRG #	5308	5308
	Dia thru BRG	1.5753	1.5753
Frame number		F20-E4	F20-E4
Instruction book		AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	16x10x22F	8x6x14F-S	H8x6x14F-S	8x6x14F-L
	Type	8150	8150	8150	8150
Stages		1	1	1	1

**Casing design**

Flange rating	Suction	125	125	250	125
	Discharge	125	125	250	125
Stages		ductile iron ASTM A536 GR 65-45-12	Ductile iron ASTM A536 GR 65-45-12	Ductile iron ASTM A536 GR 65-45-12	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		250	250	380	250
Max suction pressure (PSIG)		100	100	200	100
Max hydrostatic pressure (PSIG)		375	375	570	375
Casing wall thickness		0.72	0.58	0.58	0.58

**Stuffing box design**

Bore	5.25	3.75	3.75	3.75
Depth	4.0	3.25	3.25	3.25
Packing: # rings / size square	5 / .62	5 / .50	5 / .50	5 / .50
Seal cage width	0.62	0.50	0.50	0.50
Shaft sleeve. O.D.	4.0	2.75	2.75	2.75

**Impeller design**

# of vanes	4	5	5	6
Inlet area (IN <sup>2</sup> )	78.5	28.27	28.27	28.27
Max diameter	22.25	14.625	14.625	14.625
Min diameter	16.17	10.5	10.5	10.5
Max sphere	1.05	0.87	0.87	0.86
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	74	11.5	11.5	7.2
Wear ring clearance - diametrical	.019-.023	.015-.019	.015-.019	.015-.019

**Shaft and bearing data**

Dia thru impeller		3.625	2.5	2.5	2.5
Dia thru sleeve		3.50	2.375	2.375	2.375
Dia at coupling		3.125	1.75	1.75	1.75
Shaft span BRG to BRG		44.67	30.22	30.22	30.22
Ball bearing	In board BRG #	6316	6309	6309	6309
	Dia thru BRG	3.150	1.772	1.772	1.772
	Outboard BRG #	6316	6309	6309	6309
	Dia thru BRG	3.150	1.772	1.772	1.772
Frame number		-	-	-	-
Instruction book		AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	8x6x14F-L	8x6x15F	H8x6x15F
	Type	8150	8150	8150
Stages		1	1	1

**Casing design**

Flange rating	Suction	250	125	250
	Discharge	250	125	250
Stages		Ductile iron ASTM A536 GR 65-45-12	Ductile iron ASTM A536 GR 65-45-12	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		380	250	380
Max suction pressure (PSIG)		200	100	200
Max hydrostatic pressure (PSIG)		570	375	570
Casing wall thickness		0.58	0.58	0.58

**Stuffing box design**

Bore	3.75	3.75	3.75
Depth	3.25	3.25	3.25
Packing: # rings / size square	5 / .50	5 / .5	5 / .5
Seal cage width	0.50	0.5	0.5
Shaft sleeve. O.D.	2.75	2.75	2.75

**Impeller design**

# of vanes	6	4	4
Inlet area (IN <sup>2</sup> )	28.27	37.28	37.28
Max diameter	14.625	14.5	14.5
Min diameter	10.5	10.75	10.75
Max sphere	0.86	0.93	0.93
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	7.2	7.06	7.06
Wear ring clearance - diametrical	.015-.019	.015-.019	.015-.019

**Shaft and bearing data**

Dia thru impeller		2.5	2.5	2.5
Dia thru sleeve		2.375	2.375	2.375
Dia at coupling		1.75	1.75	1.75
Shaft span BRG to BRG		30.22	30.22	30.22
Ball bearing	In board BRG #	6309	6309	6309
	Dia thru BRG	1.772	1.772	1.772
	Outboard BRG #	6309	6309	6309
	Dia thru BRG	1.772	-	-
Frame number		-	AC6102	AC6102
Instruction book		AC6102		

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	8x6x14F-S	H8x6x14F-S	8x6x14F-L	H8x6x14F-L	8x6x18F
	Type	8200	8200	8200	8200	8200
Stages		2	2	2	2	2

**Casing design**

Flange rating	Suction	250	250	250	250	250
	Discharge	250	800	250	800	250
Casing material		Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12	Cast iron ASTM A48 class 35
Max discharge pressure (PSIG)		500	800	500	800	500
Max suction pressure (PSIG)		100	300	100	300	100
Max hydrostatic pressure (PSIG)		750	1200	750	1200	563
Casing wall thickness		0.75	0.75	0.75	0.75	0.75

**Stuffing box design**

Bore	3.75	3.75	3.75	3.75	3.75
Depth	4.06	4.06	4.06	4.06	4.06
Packing: # rings / size square	5 / .50	5 / .50	5 / .50	5 / .50	5 / .50
Seal cage width	0.94	0.94	0.94	0.94	0.94
Shaft sleeve. O.D.	2.75	2.75	2.75	2.75	2.75

**Impeller design**

# of vanes	6	6	6	6	4
Inlet area (IN <sup>2</sup> )	26.75	26.75	33.14	33.14	28.72
Max diameter	14.00	14.00	14.00	14.00	18.00
Min diameter	9.00	9.00	9.00	9.00	13.50
Max sphere	0.50	0.50	0.63	0.63	0.63
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	8.50	8.50	8.00	8.00	20.00
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		2.437	2.437	2.437	2.437	2.437
Dia thru sleeve		2.375	2.375	2.375	2.375	2.375
Dia at coupling		2.125	2.125	2.125	2.125	2.125
Shaft span BRG to BRG		33.45	33.45	33.45	33.45	33.45
Ball bearing	INBOARD BRG #	5311	5311	5311	5311	5311
	Dia thru BRG	2.1654	2.1654	2.1654	2.1654	2.1654
	Outboard BRG #	73311BG (2)	73311BG (2)	73311BG (2)	73311BG (2)	73311BG (2)
	Dia thru BRG	2.1654	2.1654	2.1654	2.1654	2.1654
Frame number		F27-A1	F27-A1	F27-A1	F27-A1	F27-A1
Instruction book		AC6102	AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	8X6X13F-S	8X6X13F-L
	Type	8250	8250
Stages		2	2

**Casing design**

Flange rating	Suction	250	250
	Discharge	250	250
Casing material		Ductile iron ASTM A536 GR 65-45-12	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		550	550
Max suction pressure (PSIG)		100	200
Max hydrostatic pressure (PSIG)		375	825
Casing wall thickness		0.58	0.58

**Stuffing box design**

Bore	4.25	4.25
Depth	3.38	3.38
Packing: # rings / size square	5 / .5	5 / .5
Seal cage width	0.5	0.5
Shaft sleeve. O.D.	3.25	3.25

**Impeller design**

# of vanes	5	5
Inlet area (IN <sup>2</sup> )	76.17	80.08
Max diameter	13.25	13.25
Min diameter	12.375	12
Max sphere	0.75	0.65
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	6.1	8.6
Wear ring clearance - diametrical	.021-.025	.021-.025

**Shaft and bearing data**

Dia thru impeller		2.875	2.875
Dia thru sleeve		2.750	2.750
Dia at coupling		2.125	2.125
Shaft span BRG to BRG		36.43	36.43
Ball bearing	INBOARD BRG #	6311	6311
	Dia thru BRG	2.166	2.166
	Outboard BRG #	5311	5311
	Dia thru BRG	-	-
Frame number		AC6102	AC6102
Instruction book		AC6102	AC6102

Supersedes all previous issues

**"H" Prefix indicates high pressure casing**

Pump	Size	12x8x21F	12x8x22F-M	14x10x20F-S	H14x10x20F-S
	Type	9100	9100	9100	9100
Stages		1	1	1	1

**Casing design**

Flange rating	Suction	125	125	125	125
	Discharge	250	250	125	250
Casing material		Cast iron ASTM A48 class 35	Cast iron ASTM A48 class 35	Cast iron ASTM A48 class 35	Ductile iron ASTM A536 GR 65-45-12
Max discharge pressure (PSIG)		250	250	200	255
Max suction pressure (PSIG)		100	100	100	200
Max hydrostatic pressure (PSIG)		375	405	262	383
Casing wall thickness		0.62	0.62	0.62	0.62

**Stuffing box design**

Bore	5.12	5.12	5.12	5.12
Depth	4.81	4.81	4.81	4.81
Packing: # rings / size square	6 / .62	6 / .62	6 / .62	6 / .62
Seal cage width	0.75	0.75	0.75	0.75
Shaft sleeve, O.D.	3.88	3.88	3.88	3.88

**Impeller design**

# of vanes	6	5	6	6
Inlet area (IN <sup>2</sup> )	35.70	68.00	112.00	112.00
Max diameter	21.80	21.00	19.80	19.80
Min diameter	12.50	12.00	9.40	9.40
Max sphere	1.00	1.40	1.63	1.63
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	49.00	52.00	46.90	46.90
Wear ring clearance - diametrical	.015-.017	.015-.017	.015-.017	.015-.017

**Shaft and bearing data**

Dia thru impeller		3.311	3.311	3.311	3.311
Dia thru sleeve		3.311	3.311	3.311	3.311
Dia at coupling		3.125	3.125	3.125	3.125
Shaft span BRG to BRG		35.80	35.80	40.50	40.50
Ball bearing	INBOARD BRG #	6316	6316	6316	6316
	Dia thru BRG	3.1502	3.1502	3.1502	3.1502
	OUTBOARD BRG #	21316	21316	21316	21316
	Dia thru BRG	3.1502	3.1502	3.1502	3.1502
Frame number		F21-D6	F21-D6	F21-E6	F21-E7
Instruction book		AC6102	AC6102	AC6102	AC6102

Supersedes all previous issues

**“H” Prefix indicates high pressure casing**

Pump	Size	16x12x23F
	Type	9100
Stages		1

**Casing design**

Flange rating	Suction	125
	Discharge	125
Casing material		Cast iron ASTM A48 class 35
Max discharge pressure (PSIG)		175
Max suction pressure (PSIG)		100
Max hydrostatic pressure (PSIG)		262
Casing wall thickness		0.62

**Stuffing box design**

Bore	5.12
Depth	4.81
Packing: # rings / size square	6 / .62
Seal cage width	0.75
Shaft sleeve. O.D.	3.88

**Impeller design**

# of vanes	6
Inlet area (IN <sup>2</sup> )	150.00
Max diameter	23.00
Min diameter	13.00
Max sphere	1.63
WR <sup>2</sup> for max dia (LBS-FT <sup>2</sup> )	109.00
Wear ring clearance - diametrical	.015-.017

**Shaft and bearing data**

Dia thru impeller		3.311
Dia thru sleeve		3.311
Dia at coupling		3.125
Shaft span BRG to BRG		40.50
Ball bearing	INBOARD BRG #	6316
	Dia thru BRG	3.1502
	OUTBOARD BRG #	21316
	Dia thru BRG	3.1502
Frame number		F21-E10
Instruction book		AC6102

Supersedes all previous issues





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