LOGAN
OIL TOOLS
A RUBICON PRODUCT BRAND



Superior Hydraulic Fishing Jar

Manual D420

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Superior Hydraulic Fishing Jar Strength Data

CHART A — SPECIFICATIONS

COMPLETE ASSEMBLY	611-306	611-312	611-313	611-375	611-377	611-376
OUTSIDE DIAMETER (INCHES)	3-1/16	3-1/8	3-1/8	3-3/4	3-3/4	3-3/4
INSIDE DIAMETER (INCHES)	1-1/2	1	1-1/2	1-1/2	1-1/4	1-7/8
CONNECTION	2-3/8 API EUE	2-3/8 API REG	2-7/8 PAC	2-3/8 API IF	2-7/8 API REG	2-3/8 API EUE
LENGTH (FEET & INCHES)	10' - 0"	10' - 0"	10' - 0"	12' - 8"	12' - 8"	12' - 8"
STROKE (INCHES)	10	10	10	10	10	10
FLOATER POSITION (INCHES)	MEASURED DISTANCE FROM FLOATER TO END OF FLOATER BODY					
@ STANDARD TEMPERATURE	8	8	8	9	9	8-3/4
@ HIGH TEMPERATURE	9-3/4	9-3/4	9-3/4	11	11	10-3/4
DRILL COLLAR WEIGHT RANGE (LBS)	300 – 4,000	300 – 4,000	300 – 4,000	400 – 6,000	400 – 6,000	400 – 6,000
PUMP OPEN AREA (SQ IN)	3	3	3	4	4	4

CHART B — STRENGTH AND TEST DATA

COMPLETE ASSEMBLY	611-306	611-312	611-313	611-375	611-377	611-376
JAR TESTER LOW TEST PULL LOAD MINIMUM / MAXIMUM (LBS)	7,000/12,000	9,000/12,000	7,000/12,000	12,000/16,000	12,000/16,000	12,000/16,000
JAR TESTER STANDARD PULL TEST (LBS)	18,000	30,000	18,000	35,000	35,000	35,000
FIELD LOAD — MAX PULL LOAD	36,000	55,000	36,000	72,000	72,000	51,000
LIFT LOAD AFTER JARRING JAR FULLY EXTENDED TENSILE @ YIELD (LBS)	185,000	253,000	185,000	330,000	330,000	285,000
TORQUE @ YIELD (FT-LBS)	4,200	7,500	4,200	14,500	14,500	9,650

CHART C — RECOMMENDED TIGHTENING TORQUES (FT-LBS)

COMPLETE ASSEMBLY	611-306	611-312	611-313	611-375	611-377	611-376
SPLINE BODY TO BALANCE BODY	2,100	2,700	2,100	3,500	3,650	3,500
BALANCE BODY TO CONNECTOR BODY	2,100	2,700	2,100	3,500	3,650	3,500
CONNECTOR BODY TO PRESSURE BODY	2,100	2,700	2,100	3,500	3,650	3,500
MANDREL TO MANDREL EXTENSION	500	600	500	700	700	700
PRESSURE BODY TO FLOATER BODY	2,100	2,700	2,100	3,500	3,650	3,500
MANDREL EXTENSION TO WASHPIPE	500	600	500	700	700	700
FLOATER BODY TO WASHPIPE BODY	2,100	2,700	2,100	3,500	3,650	3,500

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CHART A — SPECIFICATIONS

COMPLETE ASSEMBLY	611-425	611-450	611-475	611-625	611-775
OUTSIDE DIAMETER (INCHES)	4-1/4	4-1/2	4-3/4	6-1/4	7-3/4
INSIDE DIAMETER (INCHES)	2	2-3/8	2-1/4	2-1/4	3-1/16
CONNECTION	2-7/8 API IF	2-7/8 API EUE	3-1/2 API IF	4-1/2 API IF	6-5/8 API REG
LENGTH (FEET & INCHES)	13' - 6"	13' - 6"	13' - 6"	13' - 6"	15' - 0"
STROKE (INCHES)	12	12	12	12	12
FLOATER POSITION (INCHES)	MEASURED DISTANCE FROM FLOATER TO END OF FLOATER BODY				
@ STANDARD TEMPERATURE	9	9	10-3/4	10-3/4	11
@ HIGH TEMPERATURE	11	11	11-1/2	11-1/2	12-1/2
DRILL COLLAR WEIGHT RANGE (LBS)	400 – 6,000	400 – 6,000	500 – 8000	8,500 – 15,000	12,200 – 21,000
PUMP OPEN AREA (SQ IN)	6	7-1/2	7	11	16

CHART B — STRENGTH AND TEST DATA

COMPLETE ASSEMBLY	611-425	611-450	611-475	611-625	611-775
JAR TESTER LOW TEST PULL LOAD MINIMUM / MAXIMUM (LBS)	12,000/16,000	12,000/16,000	15,000/20,000	18,000/26,000	18,000/26,000
JAR TESTER STANDARD PULL TEST (LBS)	35,000	30,000	50,000	100,000	100,000
FIELD LOAD — MAX PULL LOAD	75,000	60,000	100,000	200,000	275,000
LIFT LOAD AFTER JARRING JAR FULLY EXTENDED TENSILE @ YIELD (LBS)	375,000	360,000	505,000	1,000,000	1,600,000
TORQUE @ YIELD (FT-LBS)	18,500	12,000	18,100	40,800	79,000

CHART C — RECOMMENDED TIGHTENING TORQUES (FT-LBS)

COMPLETE ASSEMBLY	611-425	611-450	611-475	611-625	611-775
SPLINE BODY TO BALANCE BODY	5,000	5,000	9,090	20,000	39,000
BALANCE BODY TO CONNECTOR BODY	5,000	5,000	9,090	20,000	39,000
CONNECTOR BODY TO PRESSURE BODY	5,000	5,000	9,090	20,000	39,000
MANDREL TO MANDREL EXTENSION	1,500	1,500	1,800	7,000	12,500
PRESSURE BODY TO FLOATER BODY	5,000	5,000	9,090	20,000	39,000
MANDREL EXTENSION TO WASHPIPE	1,500	1,500	1,000	4,800	10,500
FLOATER BODY TO WASHPIPE BODY	5,000	5,000	9,090	20,000	39,000

