

Established  
1982



A PUMP & VALVE MFG. COMPANY

Houston, Texas



*Engineered for High Performance...*



*World Class Quality 1*

MODELS: F, G & GA

1R • 1F2R • 2F3R • 3F • 3 1/2 IF • 4R • 4F • 5R • 5F6R • 6F

*Heavy Duty*



**Drill Pipe Float Valves**



# MODEL ' F ' - PLUNGER TYPE

O'Drill • MCM Float Valves & parts are 100% interchangeable with Baker®

## MODEL ' F '

SIZE	Mfg	COMPLETE ASSEMBLY P/N	METAL REPAIR KIT P/N	RUBBER REPAIR KIT P/N
1R	O'DRILL BAKER®	M-131-200 480131200	M-929-800 015929800	M-012-200 016012200
1F	O'DRILL	M-131-422	M-011-300	M-012-300
2R	BAKER®	480131422	016011300	016012300
2F	O'DRILL	M-132-432	M-011-400	M-012-400
3R	BAKER®	480132432	016011400	016012400
3F	O'DRILL	M-133-400	M-011-500	M-012-500
	BAKER®	480133400	016011500	016012500
3 1/2	O'DRILL	M-133-600	M-011-500	M-012-600
IF	BAKER®	480133600	016011500	016012600
4R	O'DRILL	M-134-200	M-011-700	M-012-700
	BAKER®	480134200	016011700	016012700
4F	O'DRILL	M-134-400	M-011-800	M-012-800
	BAKER®	480134400	016011800	016012800
5R	O'DRILL	M-135-200	M-011-900	M-012-900
	BAKER®	480135200	016011900	016012900
5F	O'DRILL	M-135-462	M-012-000	M-013-000
6R	BAKER®	480135462	016012000	016013000
6F	O'DRILL	M-136-400	M-012-100	M-013-100
	BAKER®	480136400	016012100	016013100



*Piston Type*

## Replacement Parts List for Model ' F '

Description	1R	1F 2R	2F 3R	3F	3 1/2 IF	4R	4F	5R	5F 6R	6F
1 CAGE	M-30574	M-30568	M-30538	M-30556	M-38527	M-30526	M-30532	M-30544	M-30550	M-30562
2 VALVE	M-30575	M-30569	M-30539	M-30557	M-30557	M-30527	M-30533	M-30545	M-30551	M-30563
3 VALVE SEAL	M-30576	M-30570	M-30540	M-30558	M-30558	M-30528	M-30534	M-30546	M-30552	M-30564
4 VALVE SEAL DISC	M-30577	M-30571	M-30541	M-30559	M-30559	M-30529	M-30535	M-30547	M-30553	M-30565
5 VALVE GUIDE	M-30572	M-30572	M-30542	M-30560	M-30560	M-30530	M-30536	M-30548	M-30554	M-30566
6 VALVE SPRING	M-05560	M-05626	M-01751	M-02013	M-02013	M-29610	M-27600	M-30883	M-30884	M-07369
7 SIDE SEAL	M-05561	M-05625	M-03939	M-02015	M-03988	M-03940	M-01908	M-03941	M-01958	M-01990

### Repair Kits

MODEL	Metal Repair Kit		Rubber Repair Kit	
<b>F</b>	3 valve springs, 1 valve,	1 valve guide, 1 valve seal disc	8 side seals,	2 valve seals

*When quality counts .... count on* **O'Drill/MCM**

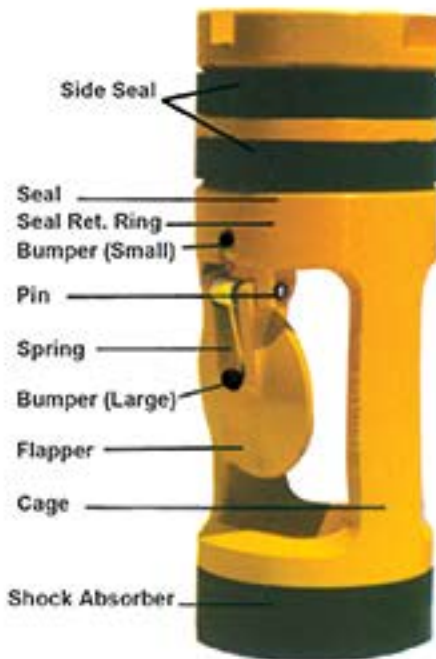
# MODEL ' G ' - Full Flow FLAPPER TYPE

O'Drill • MCM Float Valves & parts are 100% interchangeable with Baker®

## MODEL ' G '

## MODEL ' GA '

SIZE	Mfg	Complete Assembly P/N	Metal Repair Kit P/N	Rubber Repair Kit P/N	Complete Assembly P/N	Metal Repair Kit P/N	Rubber Repair Kit P/N
2F	O'DRILL	M-152-432	M-013-200	M-013-800	M-162-432	M-135-000	M-013-800
3R	BAKER®	480152432	016013200	016013800	480162432	017135000	016013800
3F	O'DRILL	M-153-400	M-013-300	M-013-900	M-163-400	M-136-700	M-013-900
	BAKER®	480153400	016013300	016013900	480163400	017136700	016013900
3 1/2 IF	O'DRILL	M-153-600	M-013-300	M-982-000	M-163-600	M-136-700	M-982-000
	BAKER®	480153600	016013300	051982000	480163600	017136700	051982000
4R	O'DRILL	M-154-200	M-013-400	M-014-000	M-164-200	M-116-000	M-014-000
	BAKER®	480154200	016013400	016014000	480164200	017116000	016014000
4F	O'DRILL	M-154-400	M-013-500	M-014-100	M-164-400	M-136-800	M-014-100
	BAKER®	480154400	016013500	016014100	480164400	017136800	016014100
5R	O'DRILL	M-155-200	M-013-600	M-014-200	M-165-200	M-136-900	M-014-200
	BAKER®	480155200	016013600	016014200	480165200	017136900	016014200
5F	O'DRILL	M-155-462	M-013-700	M-014-300	M-165-462	M-134-200	M-014-300
6R	BAKER®	480155462	016013700	016014300	480165462	017134200	016014300



Flapper Type

## Replacement Part List for Model ' G '

	Description	2F	3R	3F	3 1/2 IF	4R	4F	5R	5F	6R
1	CAGE	M-44231	M-46278	M-19658	M-44195	M-46272	M-47718	M-44238		
2	SIDE SEAL	M-03939	M-02015	M-03986	M-03940	M-01908	M-03941	M-01958		
3	SPRING	M-44235	M-46231	M-46231	M-44210	M-46226	M-46226	M-44240		
4	SEAL RETAINING RING	M-44233	M-46287	M-46287	M-43587	M-46277	M-47722	M-44237		
5	SEAL	M-43574	M-46243	M-46243	M-41303	M-45340	M-47721	M-43597		
6	FLAPPER-VALVE	M-27065	M-27054	M-27054	M-27064	M-27052	M-27053	M-27066		
7	BUMPER (LARGE)	M-44243	M-44243	M-44243	M-44213	M-44213	M-44213	M-44213		
8	PIN	M-43575	M-43575	M-43575	M-46397	M-46397	M-47723	M-43595		
9	SHOCK ABSORBER	M-43573	M-46242	M-19659	M-42709	M-45339	M-47720	M-43596		
10	BUMPER (SMALL)	M-44214	M-44214	M-44214	M-44214	M-44214	M-44214	M-44214		
11	SPRING ASSY.	M-47763	M-47764	M-47764	M-47760	M-47761	M-47761	M-47762		

## Repair Kits

MODEL	Metal Repair Kit	Rubber Repair Kit
G / GA	1 seal retaining ring, 3 spring assembly, 3 hinge pins 1 flapper valve	8 side seals, 1 shock absorber, 2 valve seals, 1 seal retaining ring

Check out our *QUALITY*... Compare our prices,  
...We are your *Best Choice!!!*

Call: (713) 541-2020 • Fax: (713) 541-9090

## MODEL ' F '

### PLUNGER TYPE WITH 'VITON' SEALS

SIZE	COMPLETE ASSEMBLY P/N	METAL REPAIR KIT P/N	RUBBER REPAIR KIT P/N
1R	M-301-200	M-084-901	M-081-701
1F 2R	M-301-422	M-085-001	M-081-801
2F 3R	M-302-432	M-085-101	M-081-901
3F	M-303-400	M-085-201	M-082-001
3 1/2 IF	M-303-600	M-085-301	M-082-101
4R	M-304-200	M-085-401	M-082-201
4F	M-304-400	M-085-501	M-082-301
5R	M-305-200	M-085-601	M-082-401
5F 6R	M-305-462	M-085-701	M-082-501
6F	M-306-400	M-085-801	M-082-601

## MODEL ' G '

### FULL FLOW FLAPPER TYPE WITH 'VITON' SEALS

SIZE	COMPLETE ASSEMBLY P/N	METAL REPAIR KIT P/N	RUBBER REPAIR KIT P/N
2F 3R	M-312-432	M-085-901	M-082-701
3F	M-313-400	M-086-001	M-082-801
4R	M-314-200	M-086-101	M-082-901
4F	M-314-400	M-086-201	M-083-001
5R	M-315-200	M-086-301	M-083-101
5F 6R	M-315-462	M-086-401	M-083-201

## Float Valve Installation

O'Drill•MCM drill pipe float valves are easy to install. Simply lubricate the side seal rubbers and slide the float valve into the cavity in the float body or drilled out drill collar.

**CAUTION:** Care must be taken in positioning the float valve in the drilling string. Fill drill pipe regularly when going in the hole. Failure to do so can cause hydro-static pressure which can cause damage to the drill pipe and/or float valve.

## Recutting drill pipe float body or Boring out drill collars

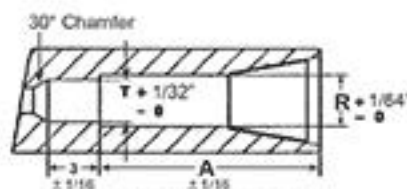
Models 'F' and 'G' are identical in outside dimensions and use the same float body or bored out drill collar. Float subs are available in 14 to 24 inches, depending on connection size. Designed for two recuts, one on each end or two on one end. Care should be taken to maintain dimension 'A' on all recuts.

## O'Drill / MCM, Inc.

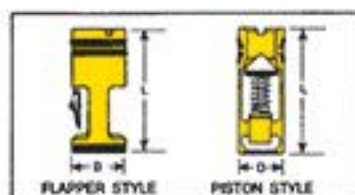
## Dimensional Data

Size Valve	D Diameter of Valve	R (D Plus 1/32) Diameter of Recess for Valve	L Length of Valve	T* Diameter of Recess for TO/CO Spider
1R	1 21/32	1 11/32	5 7/8	1 9/16
1F-2R	1 29/32	1 19/32	6 1/4	1 1/2
2F-3R	2 1/32	2 1/8	6 1/2	1 29/32
3F	2 15/16	2 21/32	10	2 1/16
3 1/2 IF	3 1/8	3 5/32	10	2 11/16
4R	3 13/32	3 1/2	8 9/16	2 5/16
4F	3 21/32	3 11/16	12	3 1/4
5R	3 7/8	3 29/32	9 3/4	3 3/8
5F-6R	4 25/32	4 15/16	11 3/4	4 1/32
6F	5 11/16	5 23/32	14 3/8	5 1/16

\* If this diameter is the same or smaller than standard tool joint ID, disregard it.



A = L (Length of Valve Assembly)  
+ Length of Tool Joint Pin = 1/4"



## Drill Pipe Float Valve Subs

API Regular Threads - Box or Pin

SIZE	O.D.	I.D.	LENGTH	VALVE
2 1/2"	3 1/4"	1"	18"	1R
2 1/2"	3 3/4"	1 1/4"	20"	1F-2R
3 3/8"	4 1/4"	1 1/2"	20"	2F-3R
4 1/8"	5 1/8"	2 1/4"	24"	4R
5 1/8"	6 1/4"	2 3/4"	28"	5R
6 1/8"	7 1/4"	3 1/4"	30"	5F-6R
7 1/8"	8 1/4"	4"	30"	5F-6R
8 1/8"	10"	4 1/4"	30"	6F

API Full Hole - Box or Pin

SIZE	O.D.	I.D.	LENGTH	VALVE
2 1/2"	4 1/4"	2 1/2"	20"	2F-3R
3 3/8"	4 1/2"	2 3/4"	24"	3F
4"	5 1/4"	2 3/4"	24"	3 1/2 IF
4 1/8"	5 1/2"	3"	28"	4F
5 1/8"	7"	4"	30"	5F-6R
6 1/8"	8"	5"	30"	6F

API IF Internal Flush - Box or Pin

SIZE	O.D.	I.D.	LENGTH	VALVE
2 1/2"	3 1/4"	1 1/4"	18"	1F-2R
2 1/2"	4"	2 1/2"	20"	2F-3R
3 3/8"	4 1/4"	2 1/2"	24"	3 1/2 IF
4"	5 1/4"	3 1/4"	28"	4F
4 1/8"	5 1/2"	3 3/4"	28"	5R
5 1/8"	7 1/4"	4 1/4"	30"	5F-6R
6 1/8"	8 1/4"	5 1/4"	30"	6F