

**Design Information****Master Cylinder  
All**

Bore (in.)	Stroke (in.)	Displ. (Cu. in)	Cleveland Model Number	Installed Length (in.)	Type	Port Size	Wgt. lbs.	Comments
.552	1.94	.43	10-30	7.50	Push	1/8-27 N.P.T.	.58	Ports in-line, no fittings, extruded aluminum body.
.552	1.96	.46	10-30A	8.36	Push	1/8-27 N.P.T.	.58	Same as 10-30, but uses rod end clevis.
.552	2.00	.43	10-30B	7.50	Push	1/8-27 N.P.T.	.58	Provides two options for mounting hole orientation
.562	1.25	.31	10-5B	8.37	Push	7/16-20	.65	Without parking valve, ports 180° apart, fitting 45°.
.562	1.25	.31	10-5C	8.37	Push	7/16-20	.65	With parking valve, ports 90° apart, fitting 45° & 90°.
.562	1.25	.31	10-5E	8.37	Push	7/16-20	.65	With parking valve, ports 180° apart, fitting 45°.
.562	1.25	.278	10-30C	6.81	Push	1/8-27 - N.P.T.	.73	Uses a custom mount with pivot pins on the side of the housing, adjacent to the inlet fitting.
.563	1.29	.31	10-5	8.37	Push	Outlet, 7/16-20 Inlet, 1/8 N.P.T.	.63	With parking valve, ports 90° apart, fitting 45°
.563	1.64	.39	10-19	8.37	Push	7/16-20	.58	Ports in-line, fittings 90°, extruded aluminum body. See Note 1
.563	1.64	.39	10-19D	8.37	Push	1/8-27 N.P.T.	.53	Ports in-line, no fittings, extruded aluminum body. See Note 1
.563	1.64	.39	10-19F	8.37	Push	Outlet, 7/16-20 Inlet, 1/8 N.P.T.	.55	Ports in-line, straight fitting, extruded aluminum body. See Note 1
.563	1.64	.39	10-19G	8.37	Push	1/8-27 N.P.T.	.53	Ports in-line, no fittings, extruded aluminum body. See Note 1
.563	1.64	.39	10-19H	8.37	Push	1/8-27 N.P.T.	.58	Ports in-line, fittings 90°, extruded aluminum body. See Note 1
.563	1.64	.39	10-19J	8.28	Push	1/8-27 N.P.T.	.53	Ports in-line, no fittings, extruded aluminum body. See Note 1
.563	1.64	.39	10-20	7.50	Push	1/8-27 N.P.T.	.52	Ports in-line, no fittings, no rod clevis extruded aluminum body.
.563	1.64	.39	10-20A	7.40	Push	1/8-27 N.P.T.	.52	Ports in-line, no fittings, no rod clevis extruded aluminum body.
.625	.875	.26	010-05701	8.62	Push	7/16-20	.65	Reservoir - Capacity = 3.0 cu. in. Bell P/N 222-380-011-103.
.625	1.09	.306	10-34	8.00	Push	1/8-27 N.P.T.	.59	Reservoir - Capacity = 3.41 cu. in. mounting hole = .190 Dia.
.625	1.09	.306	10-35	8.00	Push	1/8-27 N.P.T.	.59	Reservoir - Capacity = 3.41 cu. in. mounting hole = .250 Dia.
.625	1.20	.36	10-38	7.75	Push	1/8-27 N.P.T.	.60	Reservoir - Capacity = 3.0 cu. in.
.625	1.20	.36	10-39	7.82	Push	1/8-27 N.P.T.	.60	Reservoir - Capacity = 3.0 cu. in.

**Cleveland**  
Wheels & Brakes



## Design Information

Bore (in.)	Stroke (in.)	Displ. (Cu. in.)	Cleveland Model Number	Installed Length (in.)	Type	Port Size	Wgt. lbs.	Comments
.625	1.20	.36	10-45	7.45	Push	1/8-27 N.P.T.	.52	Reservoir - Capacity = 3.0 cu. in., mounting hole = .190 Dia.
.625	1.50	.46	10-46	7.34	Push	1/8-27 N.P.T.	.48	Ports in-line, no fittings.
.625	1.50	.46	10-49	8.20	Push	1/8-27 N.P.T.	.48	Ports in-line, no fittings.
.625	1.50	.46	10-50	8.75	Push	1/8-27 N.P.T.	.53	Beech P/N 96-380034-25.
.625	1.50	.46	10-55A	7.90	Push	1/8-27 N.P.T.	.50	Ports in-line, no fittings.
.625	1.50	.46	10-55B	7.68	Push	1/8-27 N.P.T.	.46	Ports in line, no fittings.
.625	1.50	.46	10-58D	8.28	Push	1/8-27 N.P.T.	.48	Obsolete design, superseded by 10-58E.
.625	1.50	.46	10-58E	8.28	Push	7/16-20	—	Supersedes 10-58D.
.625	1.50	.31	10-58F	8.28	Push	7/16-20	.46	Upgrade from 10-58E per SB7068.
.625	1.50	.46	10-73	9.80	Pull	3/8-24		Piper P/N 82805-3-F
.625	1.50	.42	10-88	6.83	Push	1/8-27 N.P.T.		Ports in-line, no fittings.
.626	1.62	.47	10-54	8.00	Push	1/8-27 N.P.T.	.45	Ports in-line, no fittings.
.626	1.62	.47	10-55	7.90	Push	1/8-27 N.P.T.	.45	Beech P/N 169-380100-3.
.6265	1.62	.45	10-54A	7.28	Push	1/8-27 N.P.T.	.45	Same as 10-54, except for shorter installed length.
.690	1.384	.516	10-36	8.00	Push	7/16-20	.59	Reservoir - Capacity = 3.41 cu. in., mounting hole = .250 & .190 Dia.
.750	1.25	.55	10-70	7.37	Push	7/16-20	.69	Beech P/N 104-384061-1.
.750	1.25	.55	10-70A	7.37	Push	7/16-20	.63	Beech P/N 104-384061-3.
.750	1.38	.60	10-70B	7.50	Push	7/16-20	.85	Ports in-line, no fittings.
.750	1.50	.66	10-24D	8.42	Push	1/8-27 N.P.T.	.50	Same as 10-24C, except body mounts are rotated 90°.
.750	1.50	.66	10-52	7.50	Push	1/8-27 N.P.T.	.50	Ports in-line, no fittings.
.750	1.50	.66	10-89	11.06	Push	1/8-27 N.P.T.		Ports in-line, no fittings.
.750	1.59	.68	10-22B	7.26	Push	Inlet, 7/16-20 Outlet, 1/8 N.P.T.	.50	Ports 180° apart.
.750	1.75	.77	10-21	12.75	Push	1/8-27 N.P.T.	1.50	Reservoir - Capacity = 2.88 cu. in., with parking lever.
.750	1.75	.77	10-21A	12.75	Push	1/8-27 N.P.T.	.90	Reservoir - Capacity = 2.88 cu. in., no parking brake.
.750	1.75	.77	10-22	7.20	Push	1/8-27 N.P.T.	.50	Inlet - 90°, 1/4" dia. tube.
.750	1.75	.77	10-22A	7.20	Push	1/8-27 N.P.T.	.50	No fittings.

## Design Information

Bore (in.)	Stroke (in.)	Displ. (Cu. in)	Cleveland Model Number	Installed Length (in.)	Type	Port Size	Wgt. lbs.	Comments
.751	1.52	.63	10-24C	8.42	Push	1/8-27 N.PT.	.53	Ports in-line, no fittings, extruded aluminum body.
.801	1.00	.50	010-06500	10.69	Push	7/16-20	.90	Reservoir - Capacity = 2.15 cu. in. Bell P/N 214-076-320-101.
.801	1.00	.50	010-06600	10.69	Push	7/16-20	.80	Bell P/N 214-076-327-101.
.810	1.50	.77	10-78	11.54	Push	7/16-20	.80	90°, male ports.
.812	1.50	.74	10-78A	11.54	Push	7/16-20	.80	90°, male ports.
.812	1.50	.74	10-78B	11.54	Push	7/16-20	.80	90°, male ports.
.864	1.408	.824	10-69	8.00	Push	7/16-20	.59	Reservoir - Capacity = 3.41 cu. in.
.875	1.20	.57	10-17	5.25	Pull	7/16-20	.68	Ports in-line, no fittings, extruded aluminum body. See Note 2.
.875	1.25	.66	010-06000	8.50	Push	7/16-20	.65	Bell P/N 222-380-012-101.
.925	1.25	.71	10-75	5.25	Pull	7/16-20	.60	Piper P/N 465-705.
.927	1.25	.75	10-23	5.25	Pull	7/16-20	.65	No fittings.
.927	1.25	.71	10-23A	5.25	Pull	7/16-20	.60	Same as 10-23, except with extruded aluminum body.
.927	1.25	.71	10-23C	5.25	Pull	7/16-20	.60	Extruded aluminum body.
.927	1.20	.71	10-23F	6.25	Pull	7/16-20	.81	Equipped with high strength clevis.
1.00	1.35	1.015	10-95	7.50	Push	3/8-24	TBD	Ports in-line, no fittings, extruded aluminum body.
1.0025	1.30	.95	010-05101	N/A	Push	M10 X 1(Metric)	.32	Flange mount.
1.12	1.06	.94	10-86	5.25	Pull	7/16-20	1.0	Large bore version of 10-23 series.
1.12	1.10	1.00	10-86A	6.25	Pull	7/16-20	.90	Equipped with high strength clevis.

## Notes:

1. The 10-19 Series master cylinders have been redesigned from a steel body configuration to an extruded aluminum configuration. Listed Design Information is for the extruded aluminum body master cylinder. Design Information for the steel body master cylinder is the same except for the following:

Stroke = 1.25 inches  
Displacement = .31 cubic inches  
Weight = .50 lbs.

2. The 10-17 master cylinder has been redesigned from a steel body configuration to an extruded aluminum configuration. Listed Design Information is for the extruded aluminum body master cylinder. Design Information for the steel body master cylinder is the same except for the following:

Stroke = 1.25 inches  
Displacement = .75 cubic inches  
Weight = .70 lbs.