



Micromatic

MP Models

1,000 PSI

MEDIUM PRESSURE

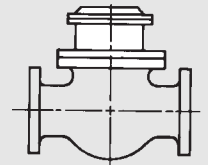
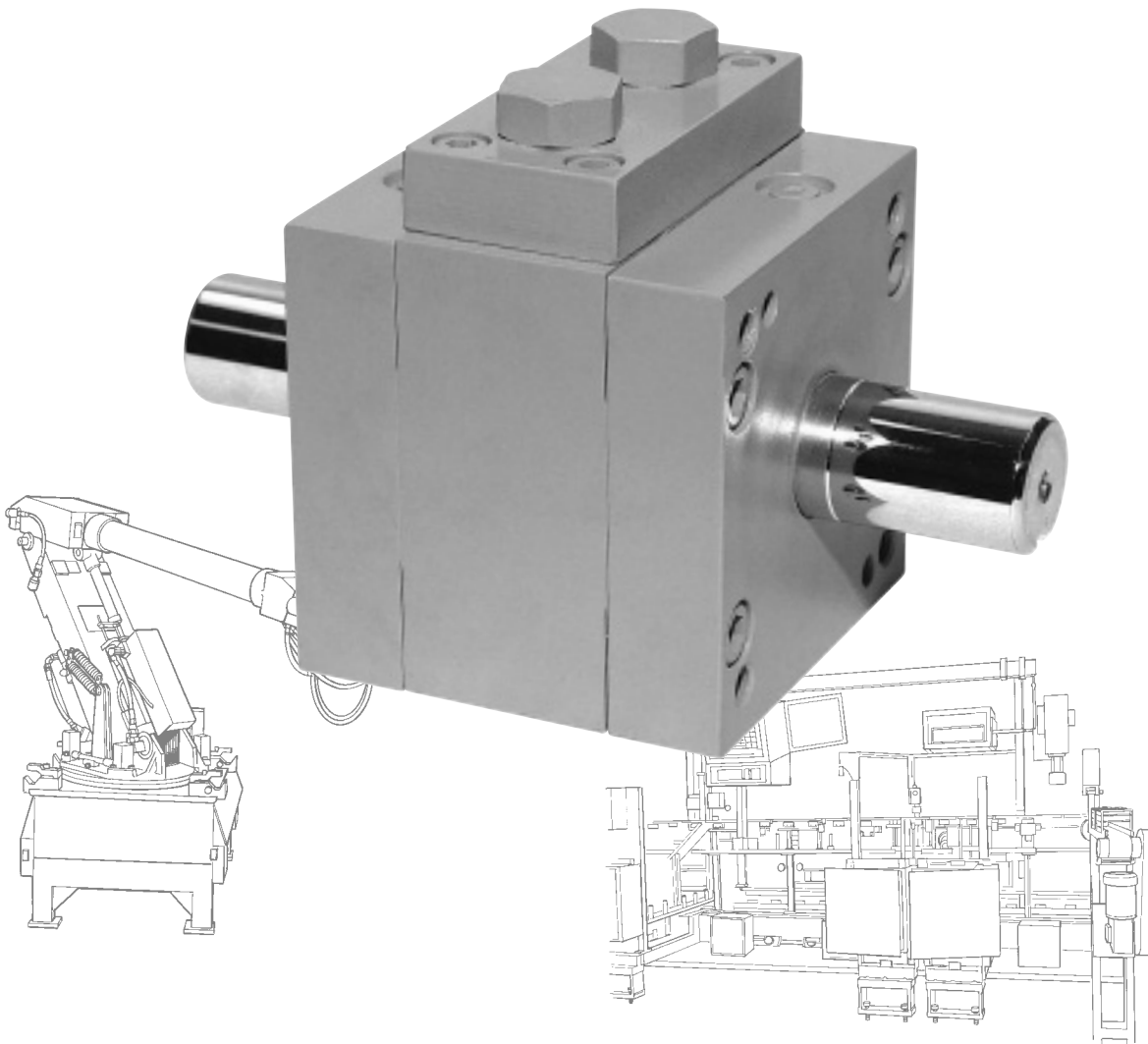
11 Standard Sizes

1,000 PSI

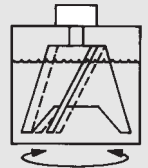
Up to 216,730 in/lbs of Torque

Higher Pressures Available

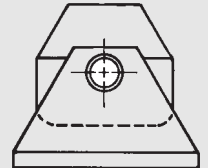
As Light As 4 oz.



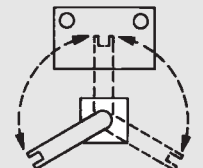
VALVE OPEN—CLOSE



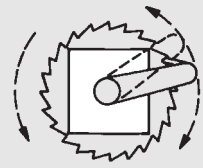
MIX—STIR



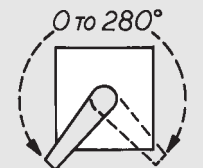
TURNOVER—DUMP



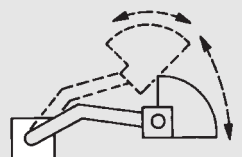
LOAD—POSITION—UNLOAD



CONTINUOUS ROTATION



TURN—OSCILLATE



MATERIAL HANDLING

PROVIDING the “MUSCLE” for your lifting, turning, indexing, opening, closing, clamping, mixing, bending, testing, steering... **applications.**

APPLICATION DATA

DIMENSIONS IN INCHES (METRIC)

	MPR-1x.4	MPR-1x1	MPJ-11	MPJ-22	MPJ-32	MPJ-34	MPJ-63	MPJ-84	MPJ-105	MPJ-116	MPJ-128
A	2.03	2.67	3.18	5.25	8.25	10.25	13.88	16.88	18.88	22.38	25.38
C	.63	.63	1.00	1.42	2.05	2.05	3.49	4.49	5.02	5.50	5.50
D	—	—	—	—	2.08	3.08	3.45	3.95	4.95	6.17	7.19
E	—	—	.54	.90	1.12	1.12	1.75	2.50	2.75	3.25	4.00
F*	—	—	.4997	.7497	1.2455	1.2455	1.9935	2.4935	2.9935	3.4935	3.9935
F1	—	—	19T	29T	—	—	—	—	—	—	—
G	—	—	40/80P	40/80P	—	—	—	—	—	—	—
H	—	—	4750PD	7250PD	—	—	—	—	—	—	—
J	—	—	—	—	1.27	1.27	2.02	3.00	3.02	3.74	—
K	—	—	—	—	(32.26)	(32.26)	(51.3)	(76.2)	(76.7)	(95)	—
L	—	—	—	—	.30	.30	.49	.49	.49	.50	.09
M	—	—	—	—	(7.6)	(7.6)	(12)	(12)	(12)	(12)	(2.3)
N*	—	—	—	—	3.25	5.25	5.50	6.00	7.00	9.50	11.25
P	—	—	—	—	(82.5)	(133.4)	(139.7)	(152.4)	(177.8)	(241.3)	(285.75)
Q	—	—	—	—	.45	.45	.70	.95	1.45	1.44	1.56
R	—	—	—	—	(11.4)	(11.4)	(17.8)	(24)	(36.8)	(36.6)	(39.6)
S	—	—	—	—	—	—	—	—	—	—	—
T**	—	—	—	—	—	—	—	—	—	—	—
U	—	—	—	—	—	—	—	—	—	—	—
V	—	—	—	—	—	—	—	—	—	—	—
W	—	—	—	—	—	—	—	—	—	—	—
X	—	—	—	—	—	—	—	—	—	—	—
Y	—	—	—	—	—	—	—	—	—	—	—
Z	.470	.470	.84	1.25	1.63	1.63	3.00	4.25	5.00	6.00	6.75
AA	(11.93)	(11.93)	(21.34)	(31.75)	(41.4)	(41.4)	(76.2)	(108)	(127)	(152.4)	(171.5)
BB	—	—	—	—	—	—	—	—	—	—	—
CC	—	—	—	—	—	—	—	—	—	—	—
CC	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—	—	—
DD	—	—	—	—	—	—	—	—	—	—	—
EE	—	—	—	—	—	—	—	—	—	—	—
FF**	—	—	—	—	—	—	—	—	—	—	—
GG	—	—	—	—	—	—	—	—	—	—	—
HH	—	—	—	—	—	—	—	—	—	—	—
JJ	—	—	—	—	—	—	—	—	—	—	—
KK	—	—	—	—	—	—	—	—	—	—	—
LL	—	—	—	—	—	—	—	—	—	—	—
MM	—	—	—	—	—	—	—	—	—	—	—

*± .0005 in. (0.01 mm) **±.005 in. (0.13 mm)

PERFORMANCE

SINGLE VANE 280° ROTATION (±5°) *						
MODEL	TORQUE IN-LBS (N•m)			VOLUMETRIC DISPLACEMENT *IN ³ (cm ³)		APPROX. WEIGHT LB (Kg)
	100 PSI (6.9 BAR)	500 PSI (34.5 BAR)	1000 PSI (69.0 BAR)	PER 280°	PER RAD	
	MPJ-11	8 (.90)	56 (6.33)	117 (13.22)	.835 (13.69)	
MPJ-22	56 (6.33)	333 (37.63)	679 (76.73)	3.82 (62.61)	.815 (13.36)	3 (1.36)
MPJ-32	103 (11.64)	705 (79.67)	1595 (180.24)	9.2 (150.79)	1.88 (30.81)	19 (8.6)
MPJ-34	206 (23.28)	1410 (159.33)	3190 (360.47)	18.4 (301.58)	3.76 (61.31)	26 (11.8)
MPJ-63	600 (67.80)	4090 (462.17)	9280 (1048.64)	53.30 (873.59)	10.90 (179)	122 (55.2)
MPJ-84	1430 (161.59)	9750 (1101.75)	22100 (2497.30)	127.40 (2088.09)	26.07 (428)	203 (92.1)
MPJ-105	2850 (322.05)	19400 (2192.20)	44000 (4972)	253.3 (4151.59)	51.83 (850)	348 (157.9)
MPJ-116	4650 (525.45)	31700 (3582)	71800 (8113)	412.9 (6767.43)	84.50 (1386)	552 (250.4)
MPJ-128	6625 (748.63)	45151 (5102)	102345 (11565)	588.4 (9643.88)	120.41 (1975)	835 (378.8)

FOR 1500 PSI (103.4 BAR) CONTACT PLANT.

DOUBLE VANE 100° ROTATION (±5°) **						
MODEL	TORQUE IN-LBS (N•m)			VOLUMETRIC DISPLACEMENT **IN ³ (cm ³)		APPROX. WEIGHT LB (Kg)
	100 PSI (6.9 BAR)	500 PSI (34.5 BAR)	1000 PSI (69.0 BAR)	PER 100°	PER RAD	
	MPR-1x.4	2 (.23)	20 (2.26)	31 (3.50)	.093 (1.52)	
MPR-1x1	5 (.57)	54 (6.10)	85 (9.60)	.258 (4.23)	.164 (2.69)	.32 (1.4)
MPJ-11	23 (2.60)	156 (17.63)	322 (36.39)	.557 (9.13)	.357 (5.85)	.84 (3.8)
MPJ-22	121 (13.67)	728 (82.26)	1487 (168.03)	2.56 (41.96)	1.63 (26.72)	3.2 (1.45)
MPJ-32	225 (25.43)	1540 (174)	3380 (381.94)	6.60 (108.17)	3.78 (62)	20 (9.1)
MPJ-34	450 (50.85)	3080 (348.04)	6750 (762.75)	13.00 (213.07)	7.44 (122)	27 (12.2)
MPJ-63	1310 (148.03)	8950 (1011.35)	19600 (2214.80)	38.0 (622.82)	21.77 (357)	126 (57.2)
MPJ-84	3120 (352.56)	21350 (2412.55)	46700 (5277.00)	91.0 (1491.49)	52.14 (855)	212 (96.2)
MPJ-105	6220 (702.86)	42500 (4802.50)	93300 (10542.90)	181.0 (2966.59)	103.7 (1700)	364 (165.1)
MPJ-116	10100 (1141.30)	69300 (7831)	152100 (17187)	295.0 (4835.05)	169.0 (2772)	581 (263.5)
MPJ-128	14450 (1633)	98735 (11157)	216730 (24490)	420.3 (6888.72)	240.8 (3950)	875 (396.9)

FOR 1500 PSI (103.4 BAR) CONTACT PLANT.

TEST PARAMETERS — OIL					
MODEL	MAX BREAK IN PSI (BAR) OIL	BY-PASS LEAKAGE MAX ALLOWABLE			
		CUBIC IN. PER MIN. AT 1000 PSI (69.0 BAR) OIL			
	1V	2V			
MPR-1x.4	50 (3.4)	—	3.5		
MPR-1x1	50 (3.4)	—	3.5		
MPJ-11	60 (4.14)	9			
MPJ-22	60 (4.14)	11			
MPJ-32	50 (3.45)	12			
MPJ-34	50 (3.45)	12			
MPJ-63	50 (3.45)	13			
MPJ-84	40 (2.8)	14			
MPJ-105	40 (2.8)	15			
MPJ-116	40 (2.8)	16			
MPJ-128	40 (2.8)	17			

WHEN REFERENCING SHADED AREAS SEE NOTES ON BOTTOM OF THIS PAGE.

NOTES:

*PER 270° MP-11 & MP-22

**PER 90°, MPR-1x.4, MPR-1x1, MP-11 & MP-22

750 PSI MAX. MPR-1x.4 & MPR-1x1

NOTE: See how to order on page 34.

MPR-1 x .4

FOR SERVICE DETAILS CONSULT FACTORY

MPR-1 x 1

FOR SERVICE DETAILS CONSULT FACTORY

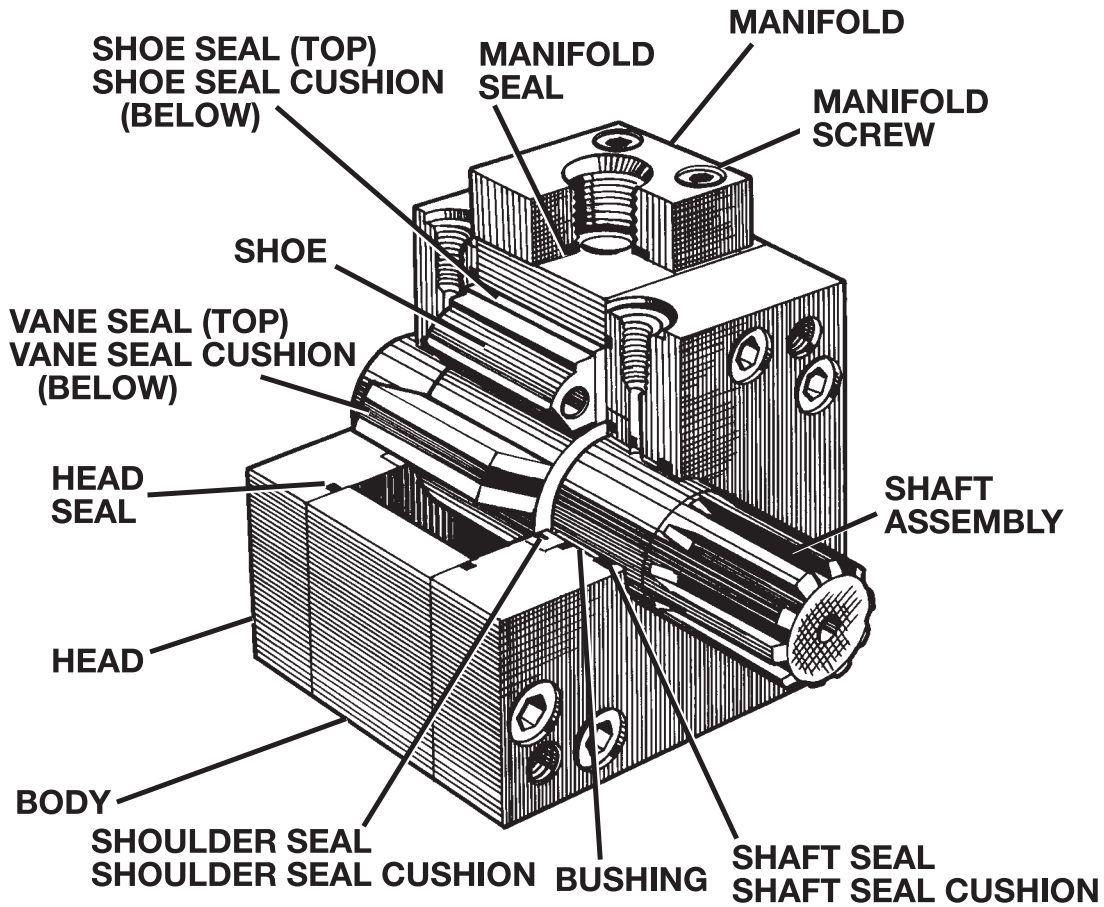
MPJ-11

FOR SERVICE DETAILS CONSULT FACTORY

MPJ-22

FOR SERVICE DETAILS CONSULT FACTORY

MPJ



HOW TO ORDER

Sample: MPJ 128 2V DE K BASE OIL

Model _____

MPJ

Size _____

Number of Vanes _____

1V—Single Vane

2V—Double Vane

Shaft Extension _____

SE—Single Extension

DE—Double Extension

Fluid Medium

Oil, Air,

Other

Mounting

End-Base, Foot,

Flange, Special

Shaft Type

SS—10-B Spline

ISER—45° Involute Serration

(MPJ-11 & MPJ-22 only)

K—Keyed

Z—Special

If you require a special shaft extension, special mounting, air bleeds, special rotation control, or other special requirements, please enclose a drawing showing these requirements.