



**McKenzie Valve
& Machining.**

A MARMON RAIL COMPANY

MVMG-U Universal Gauge Device Overview

Universal Gauge Benefits

- Keep rods in-stock for short lead times and quick repairs.
- Easier commodity change process.
- Replaces serial number confusion with uniform part number simplicity.

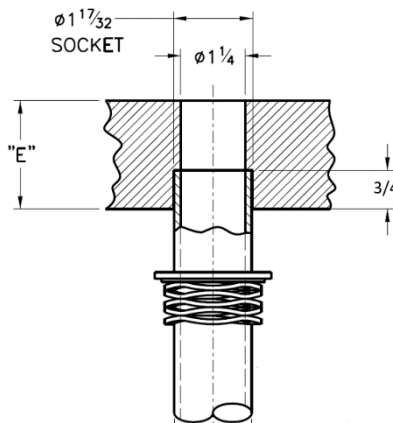
Decal ID =		D28656-01			
Commodity 1		Commodity 2		Commodity 3	
LPG		WATER		TEST	
S.G. =	0.51	S.G. =	1.00	S.G. =	2.00
MARK	OUTAGE	MARK	OUTAGE	MARK	OUTAGE
A0	OVERFULL	A0	OVERFULL	A0	OVERFULL
A1	OVERFULL	A1	OVERFULL	A1	0.27
A2	OVERFULL	A2	OVERFULL	A2	0.77
A3	OVERFULL	A3	0.02	A3	1.27
A4	OVERFULL	A4	0.52	A4	1.77
A5	OVERFULL	A5	1.03	A5	2.27
B1	OVERFULL	B1	1.53	B1	2.77
B2	OVERFULL	B2	2.03	B2	3.27
B3	0.13	B3	2.53	B3	3.77
B4	0.63	B4	3.03	B4	4.27
X3	55.13	X3	57.53	X3	58.77
X4	55.63	X4	58.03	X4	59.27
X5	56.13	X5	58.53	X5	59.77

Conversion Decal Under Housing Lid

- Lists up to 3 commodities chosen by the customer (like triple markings).
- If car converted to a non-listed commodity in the future, decal easy to change.
- Software in development to link rod mark directly to volumetric outage.

Fittings Flange Fitment

- Standard 3/4" Insertion Depth
- "E" = Flange Thickness
 - MAX = 2.625"
 - MIN = 1.375"

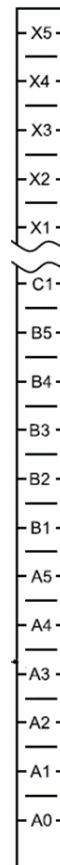


Commodity Change	
Traditional Gauge	Universal Gauge
New custom rod	Keep same rod
Potentially new guide tube	Keep same guide tube
Possible blackout on rod if non-optimal combo	No blackout
New tag & drive screws	New tag & drive screws
New O-rings	New O-rings
N/A	New outage conversion decal

To convert device to non-listed commodity, just change decal, O-rings, and ID tag.



Universal Rod Marks



Overview	
Traditional Gauge	Universal Gauge
Custom rod	Standard rod
One decal under lid (operation instruction)	Two decals under lid (operation instruction & conversion decals)
Max outage of 60" or 48"	Max outage varies slightly per configuration. (approximately 55" outage)
Standard 3/4" insertion (a.k.a. socket depth)	Standard 3/4" insertion (a.k.a. socket depth)