



bürkert
FLUID CONTROL SYSTEMS

MAGFLOW METERS INSERTION Vs FULL BORE

Insertion Vs Full Bore Magflow Meters

Fluid Control Partnership is about delivering the right product answer to your process.

A good example of a product that is frequently mis-specified is the Full Bore Magflow Meter.

An Insertion Magflow Meter (eg the Bürkert Type 8045) is often a better solution in a number of common applications.

Bürkert 8045 Insertion Magflow Meter in a WT Application; WT System Balancing Monitoring.



Common Insertion Magflow Applications

- Well and river water pump monitoring (irrigation)
- Water usage monitoring in process industry
- Farming // irrigation water use monitoring
- Flocculent dosing (makeup)
- Water balancing (WT Plants)
- Intake water monitoring (WT Plants)
- Discharge water monitoring

.. and similar applications where the Magflow Meter principle is required, but not the extreme precision of the Full Bore type.



Insertion Magflow Meter Type 8045

Plus Fluidic Fittings & Remote Display Options



**Type 8045 Insertion
Magflow Meter**

SS-316 (top)

PVDF/SS-316 (Hastalloy) (bottom)

Use the SS-316 Version unless the media is incompatible with the SS-316 armature (eg brine).

Panel & Wall Mount
Remote Displays
available



T-Piece & Riser plus
Saddle Insertion Fluidic
Fittings available



Benefits of Insertion Magflow Meter In Suitable Applications

- Significant cost saving (up to 75% on larger sizes)
- Always the same instrument and electronics
- Simple installation, no flanges
- Weld on fitting or tapping band through the pipe
- Low weight; no support or brackets required
- Simple removal for inspection and cleaning
- Highly reliable and robust with minimal maintenance needs
- May be used with all types of piping (stainless steel, cement lined, plastic)

IE Most of the benefits of the Full Bore, without the difficulties. Use the Insertion Magflow when you do not need 0.5% Accuracy.



Competitor Comparison

Burkert Type 8045 & Competitor Full Bore

Comparison of Standard Versions



Type 8045
Insertion
Magflow Meter

**Competitor Magflow
Meter with Display**

For Diameter Range
Lining/ Electrode Material

For DN6 .. 400
Stainless Steel 316L, FKM

For DN25 .. 2000
PU, Stainless Steel, 316L
(bullet nose feature)

Reference Electrode
Flow Tube Material
Body Material
Process Connection

N/A
N/A
PPA (glass fibre reinforced)
Any Insertion

Standard All Versions
Stainless Steel, 316L
Powder Coated Aluminium
DIN Flange, ANSI Flange
JIS Flange, Table Flanges

Fluid Temperature
Fluid Pressure
Accuracy
Repeatability

-15 .. +110°C
16 bar (using metal fluidic fitting)
+/- 2% M.V.
+/-0.25% M.V.

-20 +50°C
16 bar
+/-0.5% M.V.
+/-0.2% M.V.

Competitor Comparison

Burkert Type 8045 & Competitor Full Bore

Comparison of Standard Versions



8045

**Competitor Magflow
Meter with Display**

Turn Down	1 : 50	1 : 500
Flow Velocity Range	0.2 .. 10m/sec	0.01 .. 10m/sec
Min. Fluid Conductivity	20 μ S/cm	5 μ S/cm
Ambient Temperature Range	-20 .. 60°C	-20 .. 60°C
Protection Class	IP65	IP67, NEMA 4X
Power Supply	18 .. 36V DC (3 wire)	24V DC, 240V AC
Output Signal	4 ... 20mA, Relay x 2 transistor (pulse)	4 ... 20mA / HART transistor (pulse)
Digital Inputs	No	No
Batch Control	Yes	No
Data Logging //Totaliser	Limited // Yes	No // Yes
Display	Graphic	2-Line Dot-Matrix
Standard Versions	Yes	No
Delivery Time	1 .. 2 Days	2 Days .. 4 Weeks

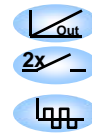
Bürkert Full Bore Magflow Meters Type 8055

For Applications Where Required



Remote Transmitters

SE55
General Purpose



SE55
Stainless Steel



Flow Fittings
DN3 .. 100 (2000)

SO51



Low Flow
Stainless Steel / PTFE
Threaded Ports

SO54/55



General Purpose
Carbon Steel / PP
Flanged, Wafer

SO56



Hygienic
Stainless Steel / PTFE
Sanitary ports, PP

Compact Transmitters
DN3 .. 100 (2000)



Low Flow

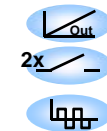


General Purpose



Hygienic

8055



Insertion Vs Full Bore Magflow Meters

It is important to consider whether an Insertion Magflow Meter is suitable, or if you really do need consider a Full Bore unit.

If your application can use an Insertion Magflow then it is generally a better option:

- More cost effective
- Much simpler installation, servicing (no flanges)
- Very straightforward operation with the same electronics used for all pipe sizes
- Used with all piping (stainless steel, cement lined, plastic)
- Highly robust (like a Magflow is)

Talk to Bürkert about how we can help you find the right product for the right job.





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Thank You!

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