


# MMSPFA+ Series

Pelton Wheel flowmeter with 316 stainless steel body, providing a pulse output.

Model Type	Flow Rate Range	Pressure Drop	Pipe Size	Weight
<b>MMSPFA.12.5</b>	1 to 65 l/min	0.2 bar @ 32l/min; 0.9 bar @ 65 l/min	½" BSP female	2.5 kg
<b>MMSPFA.20</b>	2 to 130 l/min	0.17 bar @ 65 l/min; 0.69 bar @ 130 l/min	¾" BSP female	2.5 kg
<b>MMSPFA.25</b>	3 to 160 l/min	0.17 bar @ 80 l/min; 0.69 bar @ 160 l/min	1" BSP female	4 kg
<b>MMSPFA.30</b>	5 to 220 l/min	0.17 bar @ 110 l/min; 0.69 bar @ 220 l/min	1¼" BSP female	4 kg
<b>MMSPFA.37</b>	7 to 350 l/min	0.17 bar @ 175l/min; 0.7 bar @ 350 l/min	1 ½" Wafer fitting	4 kg
<b>MMSPFA.50</b>	10 to 500 l/min	0.17 bar @ 250 l/min; 0.7 bar @ 500 l/min	2" Wafer fitting	4 kg
<b>MMSPFA.62*</b>	20 to 800 l/min	0.17 bar @ 400 l/min; 0.7 bar @ 800 l/min	2 ½" Wafer fitting	kg
<b>MMSPFA.75*</b>	25 to 1300 l/min	0.17 bar @ 650 l/min; 0.7 bar @ 1300 l/min	3" Wafer fitting	kg
<b>MMSPFA.100*</b>	25 to 2200 l/min	0.17 bar @ 1100l/min; 0.7 bar @ 2200 l/min	4" Wafer fitting	kg
<b>MMSPFA.150*</b>	100 to 5000 l/min	0.17 bar @ 2500 l/min; 0.7 bar @ 5000 l/min	6" Wafer fitting	kg
<b>MMSPFA.200L*</b>	300 to 5500 l/min	0.17 bar @ 4000 l/min; 0.7 bar @ 8000 l/min	8" Wafer fitting	kg

\*Lower flows on request

#### Common Features:

Pressure Rating	40 bar [120 bar option, add .120 to model type]	
Temperature Rating	70° C	
Viscosity Range	Up to 10 cPs; ring factory if higher	
Accuracy	±2% of actual reading for the top 90% of range. ±0.5% FSD for the bottom 10% of range. [003 and 005 linearisation required]	
Repeatability	±0.2% reading over top 90% of range	
Body and Internals	316SS with Teflon PFA rotor and sapphire/sapphire bearings	
Ferrites	Sealed	
Seal	FPM 'O' ring (subject to chemical compatibility). [120 bar version has PTFE gasket]	
Wetted parts of sensing electronics	316SS	
External materials of sensing electronics	316SS or 303SS and anodised aluminium	
Output & Power	NPN open collector with 4-way M12 sensor connector [IEC-61076-2-101] – e.g. compatible with Brad Harrison, Hirschmann, ERNI and Turck Banner. Supplied with 5m cable – bare ends. 8 to 28Vdc input.	

#### Options:

Output	PNP or TTL (identified by green or blue cap respectively). Also divide by 2, 4 or 10 function
Connections	Plain OD pipe for butt welding or flanges available in alternate sizes and styles
Flow rate, temperature and pressure	Alternate ratings available in different sizes and styles, consult factory for further details
Seals	FEP covered Silicon, EPDM or Kalrez® for chemical protection
IS Hazardous Area Version ATEX	Available in alternate styles to EEx ia IIC T5 – consult factory for further details (limited to process temperatures up to 70°C) Consult factory for input and output data. Housed in an IP65 epoxy coated die-cast aluminium body-mounted enclosure with 5pin DIN socket.
SB or BB IS Electronics pickup	For use either when instrumentation is also included in the hazardous area or an M20 gland is required. Body-mounted stainless steel or Naval Brass IP68 enclosure, one or two M20x1.5 gland entries.

#### Documentation:

Operating and Maintenance Manual	LM0111 with General Information LM0092
Installation Drawing	C6089 or C3678 and general installation C3729
Conformity:	These products conform to PED and EMC. ATEX option available.

## Flowmeter Specification Sheet