



FLOW
SWITCHES

FS-105E 0.005 - 150 l/min with adjustable set-points

FS-107E 0.1 - 90 l/min Viscosity Compensated with adjustable set-points

PISTON TYPE

The FS-105E model operates in any mounting position. It is equipped with a calibrated piston which is displaced by flow to magnetically actuate a sealed hermetic reed switch. When flow decreases a positive spring returns the piston to its prior position and de-actuates the reed switch. The reed switch assembly is movable to allow for customer setting of flow rate within the limits of the switch selected. The adjustment does not effect the flow path, therefore pressure drop is not influenced when changing set-points. Versions available are for Liquid flow only. Robust components allow a pressure of 250 bar, ideally suited for high pressure cleaning and lubrication systems.

The FS-107E model operates in any mounting position. It is equipped with a calibrated piston in a calibrated orifice for viscosity compensation over 1 to 600 cSt. The piston is displaced by flow to magnetically actuate a sealed hermetic reed switch. When flow decreases a positive spring returns the piston to its prior position and de-actuates the reed switch. The reed switch assembly is movable to allow for customer setting of flow rate within the limits of the switch selected. The adjustment does not effect the flow path, therefore pressure drop is not influenced when changing set-points. Robust components allow a pressure of 250 bar, ideally suited for high pressure lubrication systems.

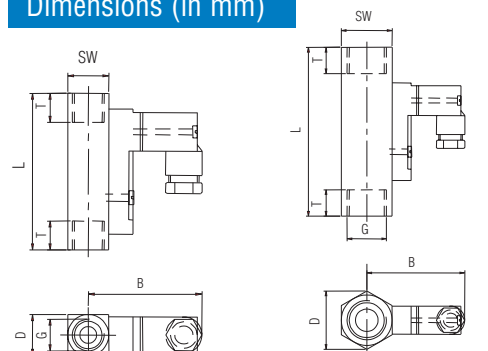
FS-105E



FS-107E



Dimensions (in mm)



Dimension

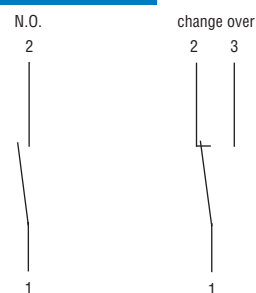
| SW | D | B | G | T | L |
|----|----|----|-----|----|-----|
| 17 | 17 | 47 | 1/4 | 10 | 65 |
| 27 | 31 | 52 | 1/2 | 14 | 90 |
| 41 | 47 | 72 | 1 | 17 | 130 |

Dimension

| SW | D | B | G | T | L |
|----|----|----|-----|----|-----|
| 27 | 31 | 52 | 1/2 | 14 | 90 |
| 41 | 47 | 72 | 1 | 17 | 130 |

Housing Nickel plated Brass
Piston Brass
Spring Stainless Steel

Wiring Diagram



Specifications

| | FS-105E | FS-107E |
|----------------------------------|---|--|
| Max flow | 100% above max. set-point range | 100% above max. set-point range |
| Max operating pressure | 250 bar | 250 bar |
| Pressure drop | 0.02 to 0.4 bar | 0.02 to 0.4 bar |
| Operating temperature | -20° to 120°C | -20° to 120°C |
| Adjustable range | see order number | see order number |
| Switching function | NO with no flow, SPDT available | NO with no flow, SPDT available |
| Mounting orientation | Any position | Any position |
| Repeatability | 1% of range | 1% of range |
| Adjustment scale accuracy | +/- 10% | +/- 5% |
| Hysteresis | max 20% | max 20% |
| Mountings | G1/4, G1/2, G1 | G1/2, G1 |
| Electrical connection | Din 43650, Mini for G1/4, G1/2, Std for G1 | Din 43650 |
| Enclosure | IP 65 | IP 65 |
| Electrical contact rating | NO - 250V, 1A, 100VA - G1 port NO - 220V, 1A, 100VA - G1/2 port NO - 200V, 1A, 20VA - G1/4 port SPDT - 250V, 1.5A, 50VA - G1, G1/2 SPDT - 200V, 1A 20VA - G1/4 port | NO - 250V, 3A, 100VA - G1 port NO - 220V, 1A, 100VA - G1/2 port |
| Weight (approx) | G1/4 - 140g, G1/2 - 350g, G1 - 1000g | |

How to Order

Order numbers for FS-105E

| Adj Range L/min | Order 'NO' | Number "SPDT" | Port |
|-----------------|------------|---------------|-------|
| 5-60 ml | 027-0100 | 027-0120 | G1/4" |
| 20-140ml | 027-0101 | 027-0121 | G1/4" |
| 0.1-0.6 | 027-0102 | 027-0122 | G1/4" |
| 0.2-1.2 | 027-0103 | 027-0123 | G1/4" |
| 0.4-2.0 | 027-0104 | 027-0124 | G1/4" |
| 0.5-3.0 | 027-0105 | 027-0125 | G1/4" |
| 1.0-5.0 | 027-0106 | 027-0126 | G1/4" |
| 0.02-0.2 | 027-0107 | 027-0127 | G1/2" |
| 0.1-0.6 | 027-0108 | 027-0128 | G1/2" |
| 0.4-1.8 | 027-0109 | 027-0129 | G1/2" |
| 0.8-3.2 | 027-0110 | 027-0130 | G1/2" |
| 2-7 | 027-0111 | 027-0131 | G1/2" |
| 3-13 | 027-0112 | 027-0132 | G1/2" |
| 4-20 | 027-0113 | 027-0133 | G1/2" |
| 8-30 | 027-0114 | 027-0134 | G1/2" |
| 15-45 | 027-0115 | 027-0135 | G1" |
| 30-90 | 027-0116 | 027-0136 | G1" |
| 60-150 | 027-0117 | 027-0137 | G1" |

Order numbers for FS-107E

| Adj Range L/min | Order 'NO' | Number "SPDT" | Port | Order No with visual indication 'NO' | Order No with visual indication "SPDT" |
|-----------------|------------|---------------|-------|--------------------------------------|--|
| 0.1-0.8 | 027-0300 | 027-0320 | G1/2" | | |
| 0.4-1.6 | 027-0301 | 027-0321 | G1/2" | | |
| 0.8-3 | 027-0302 | 027-0322 | G1/2" | | |
| 2-7 | 027-0303 | 027-0323 | G1/2" | | |
| 0.1-0.8 | 027-0304 | 027-0324 | G1" | 027-0340 | 027-0360 |
| 0.5-1.5 | 027-0305 | 027-0325 | G1" | 027-0341 | 027-0361 |
| 1-4 | 027-0306 | 027-0326 | G1" | 027-0342 | 027-0362 |
| 2-8 | 027-0307 | 027-0327 | G1" | 027-0343 | 027-0363 |
| 3-10 | 027-0308 | 027-0328 | G1" | 027-0344 | 027-0364 |
| 5-15 | 027-0309 | 027-0329 | G1" | 027-0345 | 027-0365 |
| 8-24 | 027-0310 | 027-0330 | G1" | 027-0346 | 027-0366 |
| 10-30 | 027-0311 | 027-0331 | G1" | 027-0347 | 027-0367 |
| 15-45 | 027-0312 | 027-0332 | G1" | 027-0348 | 027-0368 |
| 20-60 | 027-0313 | 027-0333 | G1" | 027-0349 | 027-0369 |
| 30-90 | 027-0314 | 027-0334 | G1" | 027-0350 | 027-0370 |

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