

MODEL 865X-XXX SHOWN 0.37 [9.5] 0.187 [4.7] 0.50 [12.7] 0.72 [18.3] -1.00 [25.4] Ø 0.18 [4.6] 0.72 [18.3] Ø 0.10 [2.5] 4x 0.35 [8.9] 0.35 [8.9]



- 1.00 [25.4] —

Ø0.25 [6.4] 2x - 2.00 [50.8]

FEATURES / BENEFITS

- Many standard port and mounting options
- Custom design and engineering available
- Miniature size, lightweight, low cost
- Quick response time
- Dependable long life (20+ million cycles)
- Gold contact points
- PCB terminals available
- Factory set, tamper proof



SPECIFICATIONS

MECHANICAL	
Standard Tolerance	±20% (Tighter tolerances available)
Switch Type	SPST normally open
Switching Medium	Air; compatible fluids on "High" port side
Mechanical Life	More than 20 million cycles
Maximum Operating Pressure	8psi: for units where set point is 3.0" H ₂ 0 or less 15psi: for units where set point is greater than 3.0" H ₂ 0 8psi: for units with Teflon [®] diaphragm
Operating Temp.	+40°F to +150°F (standard) -46°F to +205°F (contact us)
PHYSICAL	
Case Material	Polycarbonate (optional: Lexan 141, Ryton®, Ultem®, Noryl®)
Porting Options	Many standard ports — see Low Port / High Port Options next page
Diaphragm Material	Polyurethane / Teflon® (other material options available)
Contact Points	Gold
Electrical Connections	Terminals — .187"x.020" tab-type (bifurcated), for use with quick disconnects (ref. AMP 2-520182-2 or equivalent) .020"x.060" (PCB terminals available)
Mounting	#4 Screws through mounting lugs; #2 Screws through eyelets; mounting clip available for specific port arrangement only
Weight	Less than 10 grams
ELECTRICAL	
Current Rating	Up to 40mA resistive
Operating Voltage	AC/DC – 30V or less with resistive load; 120 VAC neon lamp load

Note: For higher load capabilities see our PSF103, PSF109, PSF111 and Goldtech series switches.

SET POINT OPTIONS

World Magnetics' exclusive DesignFlex™ feature allows you to quickly custom design a proven pressure, vacuum or differential switch for your application. Choose from our standard PSF101 options as shown below or contact our vertically integrated in-house design and engineering team for special features and unique application needs. Sample switch available by request.

		005	010	015	020	030	040	060	080	100	120	150	200	300	400	500	
	In. H ₂ 0	0.1 - 0.5	1.0	1.5	2.0	3.0	4.0	6.0	8.0	10.0	12.0	15.0	20.0	30.0	40.0	50.0	
	mbar	0.25 - 1.25	2.49	3.73	4.98	7.47	9.96	14.95	19.92	24.91	29.88	37.36	49.82	74.73	99.63	124.54	
	psi	0.004 -0.018	0.036	0.054	0.072	0.108	0.144	0.217	0.289	0.361	0.433	0.541	0.722	1.083	1.444	1.806	
	LOW P	ORT OP	TIO	ONS HIG							H PORT OPTIONS						
	1		2			1				2				3			
	Smooth Port .156" diameter for 1/8" ID tubing w/mtg. lugs			Smooth Port .156" diameter for 1/8" ID tubing w/o mtg. lugs				Smooth Port .156" diameter for 1/8" ID tubing			Smooth Port .187" diameter for 5/32" ID tubing				Smooth Port .250" diameter for 7/32" ID tubing		
	3			4	MM			5			4			5	5		
Smooth Port .250" diameter for 7/32" ID tubing w/mtg. lugs			Smooth Port .250" diameter for 7/32" ID tubing w/o mtg. lugs			for 3/	Barbed Port for 3/16" ID tubing w/mtg. lugs			1/8" NPT Port				Barbed Port for 3/16" ID tubing			
	6			7			8		<u>M.A</u> ©		6	0	o	7		0 0	
		Barbed Port tubing w/o mtg.	lugs	(.060" ve	No Port nt hole) w/	mtg. lugs	(.060		Port e) w/o mtg	. lugs	(No Por .060" vent				ru Barbed Port 6" ID tubing	
		Arbed Port		0		1 1		phragm Options Oolyurethane (standard) Oeffon (optional)		_	8 Barbed Port		9	9 1/4" Port			
		tubing w/mtg. l	ugs		Barbed Por tubing w/	t 'o mtg. lugs					f	barbed P or 1/8" ID t				4 Port Connect Fitting	
	Model	Guida	PSF101 S		Low Por Option Nur	Integration 261 Fount Option Milmoet											

Design Guide