

PS41 – Economical Miniature Pressure Switches

► 4 to 100 psi (0.28 to 7 bar)

These miniature pressure switches are designed for demanding applications where space and/or price are strong concerns. The switches utilize a piston/diaphragm design, which incorporates the high proof pressure of piston technology with the sensitivity of diaphragm designs. Switches are field adjustable via an Allen head screw that is hidden to protect against unauthorized tampering.

Specifications

Switch	SPST; SPDT
Repeatability	See Table 1
Wetted Parts	
Diaphragm Material	Nitrile (optional EPDM, Viton® or Neoprene)
Fitting	Brass (optional 316 Stainless Steel)
Electrical Termination	DIN 43650A IP65; Terminals IP00; Flying Leads IP65; Option IP: IP66; Conduit with Flying Leads IP65
Proof Pressure	350 psi (24 bar)
Burst Pressure	700 psi (48 bar)
Approvals	CE, UL Approved units available
Weight, Approximate	Brass: 0.3 lbs. (0.14 kg)

Recommended Operating Temperature Limits

Diaphragm Material	Options Selected		
	No option, -10A, -SP or -RD	-RD or -RD and -G	-SP or -10A
Nitrile	15°F to 185°F (-9°C to +85°C)	15°F to 250°F (-9°C to +121°C)	15°F to 212°F (-9°C to +100°C)
Viton®	0°F to 185°F (-18°C to +85°C)	0°F to 250°F (-18°C to +121°C)	0°F to 212°F (-18°C to +100°C)
EPDM	-10°F to +185°F (-23°C to +85°C)	-10°F to +250°F (-23°C to +121°C)	-10°F to +212°F (-23°C to +100°C)
Neoprene	-10°F to +185°F (-23°C to +85°C)	-10°F to +250°F (-23°C to +121°C)	-10°F to +212°F (-23°C to +100°C)

Note: Switches may function below the cold temperature limit but the set points and deadband will increase. Consult factory for details.

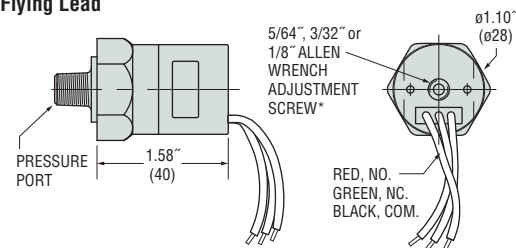
Electrical Switch Ratings

Options Selected	AC	DC
No option or -RD	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-G or -RD with -G	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts
-SP without -G	10.1 amps @ 125/250 Volts	—
-SP with -G	2 amps @ 125/250 Volts	—



Dimensions

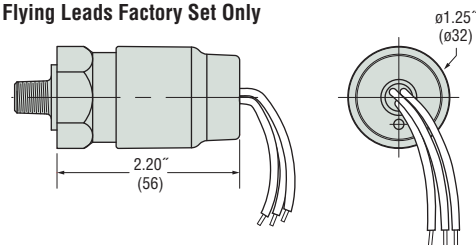
Flying Lead



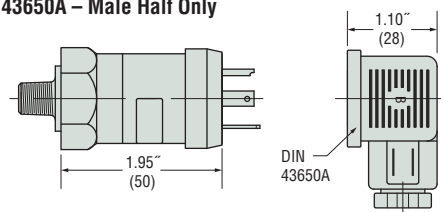
* Adjustment screw is located under protective screw.

Ingress Protection Option (IP66)

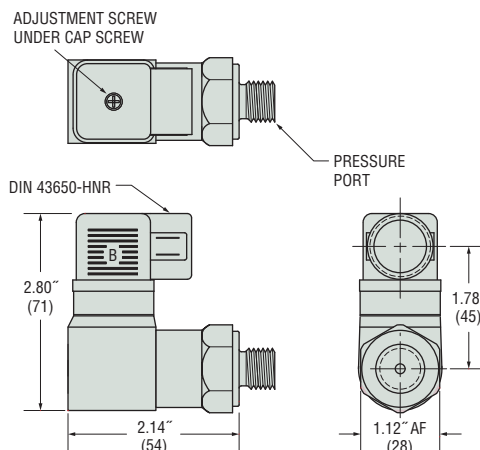
with Flying Leads Factory Set Only



DIN 43650A – Male Half Only



Right Angle DIN (HNR)



How To Order

Use the **Bold** characters from the chart below to construct a product code. Please reference Notes.

PS41 **-10** **-4MNB** **-C** **-H** **-XX** **-XXXX**

1
2
3
4
5
6

① Pressure Range Code

Insert Pressure Range Code from Table 1, below.

② Pressure Fitting¹

Brass

- 2MNB = 1/8" NPTM
- 4MNB = 1/4" NPTM
- 2MGB = 1/8" BSPM (G type)
- 4MGB = 1/4" BSPM (G type)
- 4MSB = 7/16"-20 SAE Male
- 6MSB = 9/16"-18 SAE Male

316 Stainless Steel

- 2MNS = 1/8" NPTM
- 4MNS = 1/4" NPTM
- 4MGS = 1/4" BSPM (G type)
- 4MSS = 7/16"-20 SAE Male

③ Circuit

- A = SPST/N.O.
- B = SPST/N.C.
- C = SPDT

④ Electrical Termination

- SP = Spade Terminals²
- FLXX = Flying Leads³
- FLSXX = Flying Leads w/PVC Shrink Tubing³
- ELXX = 1/2" NPT Male Conduit w/Flying Leads⁴
- CABXX = 18 AWG PVC Cable⁵
 - H = DIN 43650A Male Half Only⁶
 - HR = Right Angle DIN 43650A Male Half Only⁶
 - HC = DIN 43650A 9mm Cable Clamp⁶
 - HCR = Right Angle DIN 43650A 9mm Cable Clamp⁶
 - HN = DIN 43650A with 1/2" Female NPT Conduit⁶
 - HNR = Right Angle DIN 43650A with 1/2" Female NPT Conduit⁶

⑤ Options⁷

- V = Viton® Diaphragm
- N = Neoprene Diaphragm
- E = EPDM Diaphragm
- 10A = 10A @ 125/250 VAC Max. Rating
- G = Gold Contacts
(for loads less than 12 mA @ 12 VDC)
- RD = Reduced Differential
(25% reduction typical)
- IP = Ingress Protection⁸
- OF = Oil Free Cleaned
- WF = Weather Pack Connector, Female
- WM = Weather Pack Connector, Male
- DE = Deutsch Connector, Male, DT04 Series

⑥ Fixed Set Point (optional)

- A. Specify set point **-FS**
(in PSI or BAR, see example)⁹
- B. Set Point Actuation
R on Rising Pressure
F on Falling Pressure
Example: **-FS0.5BARF** for 0.5 BAR Falling
or **-FS5PSIR** for 5 PSI Rising

Notes:

1. Other fittings available. Consult factory.
2. Requires **-10A** or **-G** option. (20% increase in deadband typical)
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-FL18** or **-FLS30**.
4. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-EL18** or **-EL30**.
5. 36" is minimum. Specify cable length in inches. e.g. **-CAB36** or **-CAB120**.
6. DIN connectors require **-C** SPDT circuit.
7. Options **-10A**, **-G** or **-RD** cannot be combined.
8. Ingress Protection is available only with **-FL**, **-FLS** or **-CAB** Electrical Termination choices. Ingress Protection requires Fixed Set Point **-FS**.
9. Set Point must be within Pressure Range selected in Step 1.

Table 1 — Pressure Range Codes

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
10	4-8 psi (0.28-0.55 bar)	±0.35 psi (0.024 bar) +2% of setting	1.50 psi (0.10 bar) +7% of setting
20	7-30 psi (0.48-2.07 bar)	±0.8 psi (0.055 bar) +2% of setting	3 psi (0.21 bar) +8% of setting
30	25-100 psi (1.7-6.9 bar)	±2.0 psi (0.138 bar) +2% of setting	5 psig (0.28 bar) +10% of setting

* Accuracy and set point of units may change due to the effects of temperature.

** These numbers are for the standard microswitch. With either the **-SP** or **-10A** option, the values are typically 20% greater than those listed. With the **-RD** option, the values will be typically 25% less than those listed. In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.

PS71 – General Purpose Mini Pressure Switches

► 10 to 5000 psi (0.7 to 344 bar)

These versatile general purpose switches with snap action microswitches can be used in a wide range of hydraulic and pneumatic applications. Their proven piston/diaphragm design offers outstanding accuracy over a very wide pressure range with an outstanding 6000 psi proof pressure. Their modular construction allows Gems to offer a large number of standard pressure fittings in two materials as well as numerous electrical ratings and terminations. Users can easily configure this model to meet their needs.

Specifications

Switch	SPST; SPDT
Repeatability	See Table 1
Wetted Parts	
Diaphragm	Nitrile (optional EPDM, Viton® or Neoprene)
Fitting	Zinc-Plated Steel (Optional 316 SS)
Electrical Termination	DIN 43650A IP65; Spade Terminals IP00; Flying Leads IP65; Conduit with Flying Leads IP65; IP option IP66
Proof Pressure	6000 psi (414 bar)
Burst Pressure	9000 psi (621 bar)
Approvals	CE, UL Approved units available
Weight, Approximate	0.4 lbs. (0.15 kg)

Recommended Operating Temperature Limits

Diaphragm Material	Options Selected		
	No option, -10A, -SP or -RD	-RD or -RD and -G	-SP or -10A
Nitrile	15°F to 185°F (-9°C to +85°C)	15°F to 250°F (-9°C to +121°C)	15°F to 212°F (-9°C to +100°C)
Viton®	0°F to 185°F (-18°C to +85°C)	0°F to 250°F (-18°C to +121°C)	0°F to 212°F (-18°C to +100°C)
EPDM	-10°F to +185°F (-23°C to +85°C)	-10°F to +250°F (-23°C to +121°C)	-10°F to +212°F (-23°C to +100°C)
Neoprene	-10°F to +185°F (-23°C to +85°C)	-10°F to +250°F (-23°C to +121°C)	-10°F to +212°F (-23°C to +100°C)

Note: Switches may function below the cold temperature limit but the set points and deadband will increase. Consult factory for details.

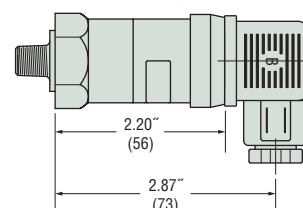
Electrical Switch Ratings

Options Selected	AC	DC
No option or -RD	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-G only or -RD with -G	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts
-10A only or -SP without -G	10.1 amps @ 125/250 Volts	—
-SP with -G	2 amps @ 125/250 Volts	—

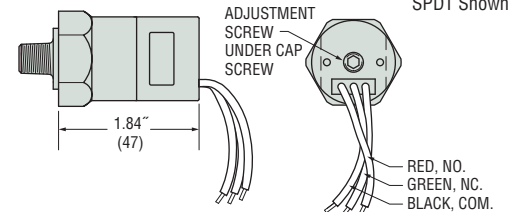


Dimensions

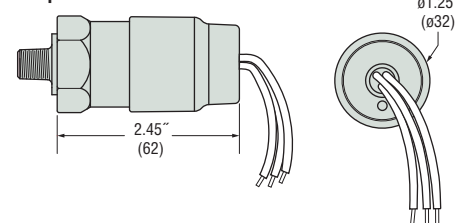
DIN 43650A with Cable Clamp



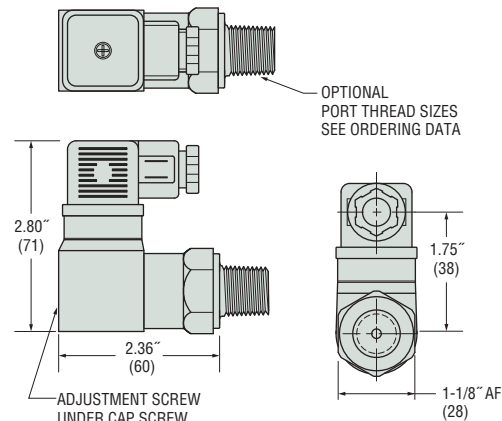
Flying Lead



IP66 Option



Right Angle DIN 43650A with Cable Clamp



How To Order

Use the **Bold** characters from the chart below to construct a product code. Please reference Notes.

PS71 **-10** **-4MNZ** **-C** **-H** **-XX** **-XXXX**

1
2
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4
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① Pressure Range Code

Insert Pressure Range Code from Table 1, below.

② Pressure Fitting¹

12L14 Zinc-Plated Steel

- 2MNZ=1/8" NPTM
- 4MNZ=1/4" NPTM
- 8MNZ=1/2" NPTM
- 2MGZ=1/8" BSPM (G type)
- 4MGZ=1/4" BSPM (G type)
- 4MSZ=7/16"-20 SAE Male
- 6MSZ=9/16"-18 SAE Male
- M10Z=M10 x 1.0, Straight
- M12Z=M12 x 1.5, Straight
- M14Z=M14 x 1.5, Straight

316 Stainless Steel

- 2MNS=1/8" NPTM
- 4MNS=1/4" NPTM
- 2MGS=1/8" BSPM (G type)
- 4MGS=1/4" BSPM (G type)

③ Circuit

- A=SPST/N.O.
- B=SPST/N.C.
- C=SPDT

④ Electrical Termination

- SP=Spade Terminals²
- FLXX=Flying Leads³
- FLSXX=Flying Leads w/PVC Shrink Tubing³
- ELXX=1/2" NPT Male Conduit w/Flying Leads⁴
- CABXX=18 AWG PVC Cable⁵
 - H=DIN 43650A Male Half Only⁶
 - HR=Right Angle DIN 43650A Male Half Only⁶
 - HC=DIN 43650A 9mm Cable Clamp⁶
 - HCR=Right Angle DIN 43650A 9mm Cable Clamp⁶
 - HN=DIN 43650A with 1/2" Female NPT Conduit⁶
 - HNR=Right Angle DIN 43650A with 1/2" Female NPT Conduit⁶

⑤ Options⁷

- V=Viton® Diaphragm
- E=EPDM Diaphragm
- N=Neoprene Diaphragm
- 10A=10A @ 125/250 VAC Max. Rating
- G=Gold Contacts
(for loads less than 12 mA @ 12 VDC)
- RD=Reduced Differential
(25% reduction typical)
- IP=Ingress Protection⁸
- OF=Oil Free Cleaned⁹
- R=Restrictor (low damping coefficient) Brass
- SR=Spiral Restrictor (high damping coefficient)
300 Series Stainless Steel¹⁰
- WF=Weather Pack Connector, Female
- WM=Weather Pack Connector, Male
- DE=Deutsch Connector, Male, DT04 Series

⑥ Fixed Set Point (optional)

- A. Specify set point **-FS**
(in PSI or BAR, see example)¹¹
- B. Set Point Actuation
R on Rising Pressure
F on Falling Pressure
Example: **-FS2BARF** for 2 BAR Falling
or **-FS20PSIR** for 20 PSI Rising

Notes:

1. Other fittings available. Consult factory.
2. 20% increase in deadband typical.
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-FL18** or **-FLS30**.
4. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-EL18** or **-EL30**.
5. 36" is minimum. Specify cable length in inches. e.g. **-CAB36** or **-CAB120**.
6. DIN connectors require **-C** SPDT circuit.
7. Options **-10A**, **-G** or **-RD** cannot be combined.
8. Ingress Protection is available only with **-FL**, **-FLS** or **-CAB** Electrical Termination choices. Ingress Protection requires Fixed Set Point **-FS**.
9. Requires stainless steel housing.
10. **-SR** will result in wider deadbands and slower response time.
11. Set Point must be within Pressure Range selected in Step 1.

Table 1 — Pressure Range Codes

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
10	10-30 psi (0.7-2.1 bar)	±1.5 psi (0.103 bar) +2% of setting	3.5 psi (0.28 bar) +11% of setting
20	25-75 psi (1.7-5.2 bar)	±2.5 psi (0.172 bar) +2% of setting	3.5 psi (0.28 bar) +11% of setting
30	65-300 psi (4.5-20.7 bar)	±5.0 psi (0.345 bar) +2% of setting	20 psig (1.38 bar) +11% of setting
40	250-1000 psi (17.2-69.0 bar)	±15 psi (1.03 bar) +2% of setting	45 psig (3.10 bar) +12% of setting
50	1000-3000 psi (69-206.8 bar)	±30 psi (2.06 bar) +3% of setting	70 psig (4.83 bar) +12% of setting
60	2500-5000 psi (172.4-344.7 bar)	±50 psi (3.45 bar) +4% of setting	140 psi (9.65 bar) +13% of setting

* Accuracy and set point of units may change due to the effects of temperature.

** These numbers are for the standard microswitch. With either the **-SP** or **-10A** option, the values are typically 20% greater than those listed. With the **-RD** option, the values will be typically 25% less than those listed. In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.

PS72 – General Purpose Mini Pressure Switches

- ▶ 10 to 750 psi (0.7 to 51.7 bar)
- ▶ Adjustable or Factory Set
- ▶ Minimal Set Point Change at Low Temperature Extremes

These versatile microswitch based pressure switches are designed for medium pressure OEM applications. They offer all the performance of our proven PS71 model with the low temperature capability of Kapton®.

Specifications

Switch	SPST; SPDT
Repeatability	See Table 1
Wetted Parts	
Housing	Zinc-Plated Steel (316L stainless steel and brass available)
Diaphragm	Kapton® (polyimide)
O-Ring	Nitrile (other materials available)
Electrical Termination	DIN 43650A IP65; Spade Terminals IP00; Flying Leads IP65; Conduit with Flying Leads IP65; IP option IP66
Proof Pressure	3000 psi (207 bar)
Burst Pressure	6000 psi (414 bar)
Approvals	CE, UL Approved units available
Weight, Approximate	Steel: 0.4 lbs. (0.15 kg)

Recommended Operating Temperature Limits

Options Selected	Temperature
-RD	-40°F to +250°F (-40°C to +121°C)
No Options	-40°F to +185°F (-40°C to +85°C)
-SP or -10A	-40°F to +212°F (-40°C to +100°C)

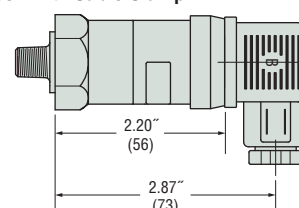
Electrical Switch Ratings

Options Selected	AC	DC
No option or -RD	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-G only or -RD with -G	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts
-10A only or -SP without -G	10.1 amps @ 125/250 Volts	—
-SP with -G	2 amps @ 125/250 Volts	—

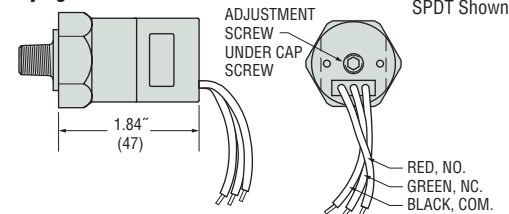


Dimensions

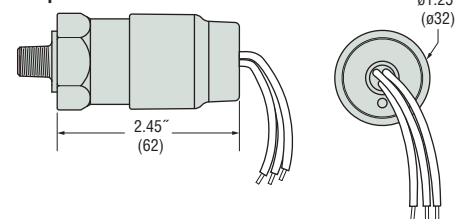
DIN 43650A with Cable Clamp



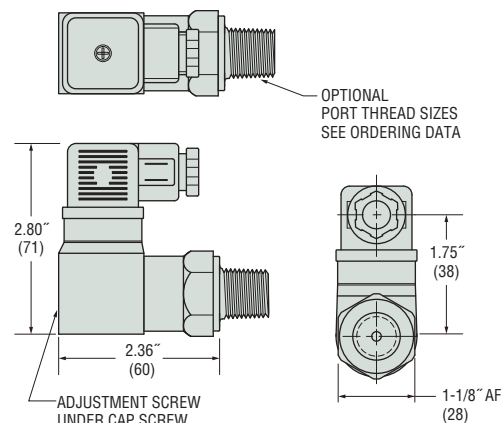
Flying Lead



IP66 Option



Right Angle DIN 43650A with Cable Clamp



How To Order

Use the **Bold** characters from the chart below to construct a product code. Please reference Notes.

PS72 **-10** **-4MNZ** **-C** **-H** **-XX** **-XXXX**

1
2
3
4
5
6

① Pressure Range Code

Insert Pressure Range Code from Table 1, below.

② Pressure Fitting¹

12L14 Zinc-Plated Steel

- 2MNZ**=1/8" NPTM
- 4MNZ**=1/4" NPTM
- 2MGZ**=1/8" BSPM (G type)
- 4MGZ**=1/4" BSPM (G type)
- 4MSZ**=7/16"-20 SAE Male
- 6MSZ**=9/16"-18 SAE Male

316 Stainless Steel

- 2MGS**=1/8" BSPM (G type)
- 4MNS**=1/4" NPTM
- 4MGS**=1/4" BSPM (G type)

③ Circuit

- A**=SPST/N.O.
- B**=SPST/N.C.
- C**=SPDT

④ Electrical Termination

- SP**=Spade Terminals²
- FLXX**=Flying Leads³
- FLSXX**=Flying Leads w/PVC Shrink Tubing³
- ELXX**=1/2" NPT Male Conduit w/Flying Leads⁴
- CABXX**=18 AWG PVC Cable⁵
 - H**=DIN 43650A Male Half Only⁶
 - HR**=Right Angle DIN 43650A Male Half Only⁶
 - HC**=DIN 43650A 9mm Cable Clamp⁶
 - HCR**=Right Angle DIN 43650A 9mm Cable Clamp⁶
 - HN**=DIN 43650A with 1/2" Female NPT Conduit⁶
 - HNR**=Right Angle DIN 43650A with 1/2" Female NPT Conduit⁶

⑤ Options⁷

- 10A**=10A @ 125/250 VAC Max. Rating
- G**=Gold Contacts
(for loads less than 12 mA @ 12 VDC)
- RD**=Reduced Differential
(25% reduction typical)
- IP**=Ingress Protection⁸
- OF**=Oil Free Cleaned⁹
- R**=Restrictor (low damping coefficient) Brass
- SR**=Spiral Restrictor (high damping coefficient)
300 Series Stainless Steel¹⁰
- WF**=Weather Pack Connector, Female
- WM**=Weather Pack Connector, Male
- DE**=Deutsch Connector, Male, DT04 Series

⑥ Fixed Set Point (optional)

- A. Specify set point -**FS**
(in PSI or BAR, see example)¹¹
- B. Set Point Actuation
R on Rising Pressure
F on Falling Pressure
Example: -**FS2BARF** for 2 BAR Falling
or -**FS20PSIR** for 20 PSI Rising

Notes:

1. Other fittings available. Consult factory.
2. Requires -**10A** or -**G** option. (20% increase in deadband typical)
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. -**FL18** or -**FLS30**.
4. 18" is standard. Specify lead length in inches (max. 48"). e.g. -**EL18** or -**EL30**.
5. 36" is minimum. Specify cable length in inches. e.g. -**CAB36** or -**CAB120**.
6. DIN connectors require -**C** SPDT circuit.
7. Options -**10A**, -**G** or -**RD** cannot be combined.
8. Ingress Protection is available only with -**FL**, -**FLS** or -**CAB** Electrical Termination choices. Ingress Protection requires Fixed Set Point -**FS**.
9. Requires stainless steel housing.
10. -**SR** will result in wider deadbands and slower response times.
11. Set Point must be within Pressure Range selected in Step 1.

Table 1 — Pressure Range Codes

Pressure Range Code	Pressure Range	Accuracy	Average Deadband*
10	10-30 psi (0.7-2.1 bar)	±1.5 psi (0.103 bar) +3% of setting	3.5 psi (0.28 bar) +12% of setting
20	25-75 psi (1.7-5.2 bar)	±2.5 psi (0.172 bar) +3% of setting	3.5 psi (0.28 bar) +12% of setting
30	65-300 psi (4.5-20.7 bar)	±5.0 psi (0.345 bar) +3% of setting	20 psig (1.38 bar) +12% of setting
40	250-750 psi (17.2-51.7 bar)	±15 psi (1.03 bar) +3% of setting	45 psig (3.10 bar) +13% of setting

* These numbers are for the standard microswitch. With either the -SP or -10A option, the values are typically 20% greater than those listed. With the -RD option, the values will be typically 25% less than those listed. In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.

PS75 – Rugged Cylindrical Pressure Switch

- ▶ Side Mounted DIN Connection
- ▶ Top Mounted Electrical Connection
- ▶ 5 to 6000 psi (0.35 to 414 bar)
- ▶ Wear Disc Design for Longer Life

Gems PS75 Series have all metal surfaces for overload stops and deliver reliable operation under extremely high pressure surges. They are designed with a wear disc and cushioning ring for increased life. The switches use a piston/diaphragm design, which combine the high proof pressure of piston technology with the sensitivity of a diaphragm design. They can be field or factory adjusted.

Specifications

Switch	SPST; SPDT
Repeatability	See Table 1
Wetted Parts	
Diaphragm	Nitrile (optional Viton®, Neoprene or EPDM)
Fitting	Zinc-Plated Steel (optional 316 Stainless Steel)
Housing	Brass or Zinc-Plated Steel (optional 316 Stainless Steel)
Electrical Termination	DIN 43650A IP65; Conduit with Flying Leads IP65; Flying Leads IP65
Proof Pressure	7500 psi (517 bar) except range 10: 500 psi (35 bar)
Burst Pressure	9000 psi (621 bar)
Approvals	CE, UL Approved units available
Weight, Approximate	Steel: 0.6 lbs. (0.27 kg)

Recommended Operating Temperature Limits

Diaphragm Material	Circuit Codes	
	-A, -B, -C	-A, -B, -C with -RD option
Nitrile (Std)	15°F to 185°F (-9°C to +85°C)	15°F to 250°F (-9°C to +121°C)
Viton®	0°F to 185°F (-18°C to +85°C)	0°F to 250°F (-18°C to +121°C)
EPDM	-10°F to +185°F (-23°C to +85°C)	-10°F to +250°F (-23°C to +121°C)
Neoprene	-10°F to +185°F (-23°C to +85°C)	-10°F to +250°F (-23°C to +121°C)

Note: Switches may function below the cold temperature limit but the set points and deadband will increase. Consult factory for details.

Electrical Switch Ratings

Circuit Code	AC	DC
-A, -B, -C¹	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-A, -B, -C²	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts

Notes:

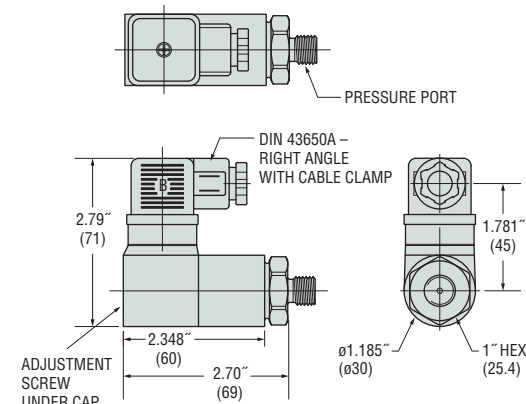
1. Without Gold Contacts Option (-G).
2. With Gold Contacts Option (-G).



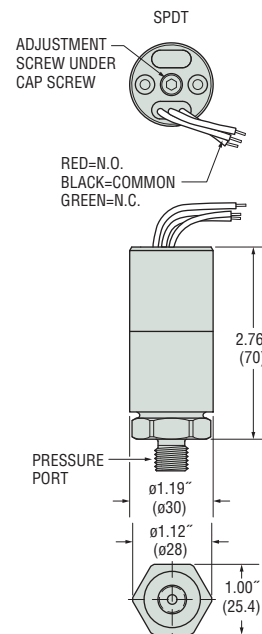
CE US

Dimensions

Right Angle DIN 43650A with Cable Clamp



Flying Lead



How To Order

Use the **Bold** characters from the chart below to construct a product code. Please reference Notes.

PS75 **-10** **-4MNZ** **-C** **-H** **-XX** **-XXXX**

1
2
3
4
5
6

① Pressure Range Code

Insert Pressure Range Code from Table 1, below.

② Pressure Fitting¹

12L14 Zinc-Plated Steel

- 2MNZ=1/8" NPTM
- 4MNZ=1/4" NPTM
- 4FNZ=1/4" NPTF
- 4MGZ=1/4" BSPM (G type)
- 4FGZ=1/4" BSPF (G type)
- 4MSZ=7/16"-20 SAE Male
- 6MSZ=9/16"-18 SAE Male
- 4SSZ=7/16"-20 SAE Male Swivel

316 Stainless Steel

- 4MNS=1/4" NPTM
- 4MGS=1/4" BSPM (G type)
- 4FGS=1/4" BSPF (G type)
- 4FNS=1/4" NPTF
- 6MSS=9/16"-18 SAE Male

③ Circuit

- A=SPST/N.O.
- B=SPST/N.C.
- C=SPDT

④ Electrical Termination

- FLXX=Flying Leads²
- FLSXX=Flying Leads w/PVC Shrink Tubing²
- ELXX=1/2" NPT Male Conduit w/Flying Leads³
- H=DIN 43650A Male Half Only⁴
- HR=Right Angle DIN 43650A Male Half Only⁴
- HC=DIN 43650A 9mm Cable Clamp⁴
- HCR=Right Angle DIN 43650A 9mm Cable Clamp⁴
- HN=DIN 43650A with 1/2" Female NPT Conduit⁴
- HNR=Right Angle DIN 43650A with 1/2" Female NPT Conduit⁴

⑤ Options

- V=Viton[®] Diaphragm
- N=Neoprene Diaphragm
- E=EPDM Diaphragm
- G=Gold Contacts
(for loads less than 12 mA @ 12 VDC)
- RD=Reduced Differential (25% reduction typical)
- OF=Oil Free Cleaned⁵
- R=Restrictor (low damping coefficient) Brass
- SR=Spiral Restrictor (high damping coefficient)
300 Series Stainless Steel⁶
- WF=Weather Pack Connector, Female
- WM=Weather Pack Connector, Male
- DE=Deutsch Connector, Male, DT04 Series

⑥ Fixed Set Point (optional)

A. Specify set point **-FS** (in PSI or BAR, see example)⁷

B. Set Point Actuation

R on Rising Pressure

F on Falling Pressure

Example: **-FS1BARF** for 1 BAR Falling

or **-FS20PSIR** for 20 PSI Rising

Notes:

1. Manifold mounts available. Consult factory.
2. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-FL18** or **-FL30**.
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-EL18** or **-EL30**.
4. DIN connectors require **-C** SPDT circuit.
5. Requires stainless steel pressure fitting.
6. **-SR** will result in wider deadbands and slower response times.
7. Set Point must be within Pressure Range selected in Step 1.

Table 1 — Pressure Range Codes

For Circuit Codes -A, -B and -C

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
10	5-25 psi (0.35-1.7 bar)	±1.0 psi (0.07 bar) +2% of setting	3 psi (0.21 bar) +5% of setting
20	15-75 psi (1.0-5.2 bar)	±2.5 psi (0.17 bar) +2% of setting	5 psig (0.34 bar) +10% of setting
30	50-150 psi (3.5-10.3 bar)	±6 psi (0.41 bar) +2% of setting	15 psig (1.03 bar) +13% of setting
40	150-650 psi (10.3-44.8 bar)	±15 psi (1.03 bar) +2% of setting	25 psi (1.72 bar) +14% of setting
50	500-1750 psi (34.5-121 bar)	±25 psi (1.72 bar) +2% of setting	55 psi (3.79 bar) +15% of setting
60	1000-3500 psi (69-241 bar)	±45 psi (3.10 bar) +3% of setting	100 psi (6.89 bar) +16% of setting
70	2500-6000 psi (172-414 bar)	±80 psi (5.51 bar) +4% of setting	200 psi (13.8 bar) +17% of setting

* Accuracy and set point of units may change due to the effects of temperature.

** In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.

PS76 – Rugged Cylindrical Pressure Switch

- ▶ Side Mounted DIN Connection
- ▶ Top Mounted Electrical Connection
- ▶ 15 to 1750 psi (1 to 121 bar)
- ▶ Minimal Set Point Change at Low Temperature Extremes

These versatile microswitch based pressure switches are designed for high pressure OEM applications. They offer all the performance of our proven PS75 model with the low temperature capability of Kapton®.

Specifications

Switch	SPST; SPDT
Repeatability	See Table 1
Wetted Parts	
Port Fitting	Zinc-Plated Steel (316L Stainless Steel available)
Diaphragm	Kapton® (polyimide)
O-Ring	Nitrile (other materials available)
Electrical Termination	DIN 43650A IP65; Conduit with Flying Leads IP65; Flying Leads IP65
Proof Pressure	4500 psi (310 bar) except Range 10: 500 psi (35 bar)
Burst Pressure	6000 psi (414 bar)
Approvals	CE, UL Approved units available
Weight, Approximate	Steel: 0.6 lbs. (0.27 kg)

Recommended Operating Temperature Limits

Diaphragm Material	Circuit Codes	
	-A, -B, -C	-A, -B, -C with -RD option
Teflon® Coated Kapton®	-40°F to +185°F (-40°C to +85°C)	-40°F to +250°F (-40°C to +121°C)

Electrical Switch Ratings

Circuit Code	AC	DC
-A, -B, -C ¹	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-A, -B, -C ²	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts

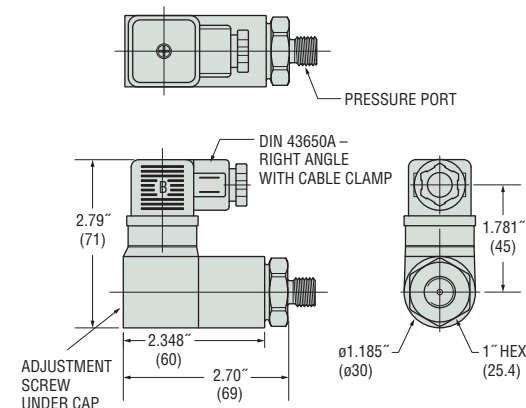
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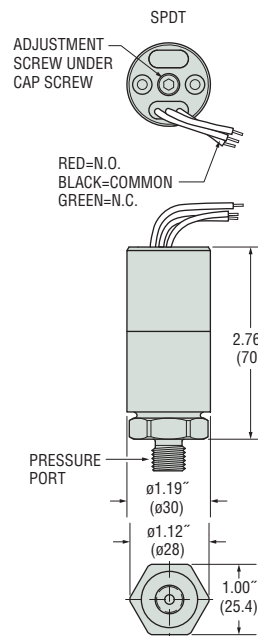


Dimensions

Right Angle DIN 43650A with Cable Clamp



Flying Lead



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