

COMPACT[®]
AUTOMATION PRODUCTS

Sensor Components



Comtronic® Standard Limit Sensors

Comtronic® Standard Limit Sensors

- Low Cost and Compact® size
- Dual LED indicators for power and signal
- Circuit protection for surge and polarity
- High-flex robotic grade cable with 4,8mm (3/16") bend radius. 105 strand primaries.
- CE compliant / IP67 and NEMA 6P rated
- 100% solid state device for maximum life
- 3 cord options

(Shown with Quick Disconnect Option, see Page 3 for details)



Must specify 'K' (sinking) or 'C' (sourcing) when ordering

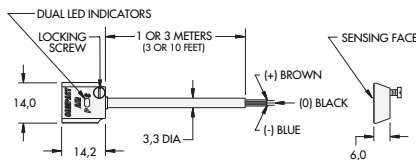
WS_LP **WS_LPS**

Dimensional Information

Must specify 'K' (sinking) or 'C' (sourcing) when ordering

WS_L **WS_L-3**

"3" denotes 3 meter cable



Part No. **WSKL-3** - Sinking output with 3 meter cable.



NOTE: This universal sensor is used for all Compact cylinders, inch or metric. Inch and metric sold separately, not installed.

Part No.	Sensor Type (Wiring diagrams and definitions on page 5)	Cord Types		
		Quick Disconnect	1 Meter	3 Meter
Sinking	WSKL		✓	
	WSKLP	✓*		
	WSKL-3			✓
	WSKLPS	✓*		
Sourcing	WSCL		✓	
	WSCLP	✓*		
	WSCL-3			✓
	WSCLPS	✓*		

*Mating 3 socket receptacle available, part # R3
"3" denotes 3 meter cable

Specifications		
Parameters	Comtronic® Standard Limit Sensors	
	NPN (sinking)	PNP (sourcing)
Part Number	WSKL, WSKL-3, WSKLP, WSKLPS	WSCL, WSCL-3, WSCLP, WSKLPS
Operating Voltage	5-24 VDC	
Current Consumption		
On	16mA (at 24V)	14mA (at 24V)
Off	7mA (at 24V)	7mA (at 24V)
Switching Current	100mA Max	
Voltage Drop	1.5 V Max @ 100mA	
Operating Frequency	1 KHz Max	
Switch Logic	Sinking, Normally Open	Sourcing, Normally Open
LED Function	Red (Switch Active)	Green (Switch Active)
Operating Temperature	0°C to 70°C	
Circuit Protection	Reverse Polarity / Surge Absorber	
Environmental Certifications	IEC standard IP67, NEMA 6P	
Wire Type	High flex, 24 AWG / 105 strand primary	
Housing Material	Zinc diecast	
Housing Color Code	Black	Silver
Shock Resistance	30G Max	
Vibration Strength	9G Max	

Compact® Round Limit Sensors

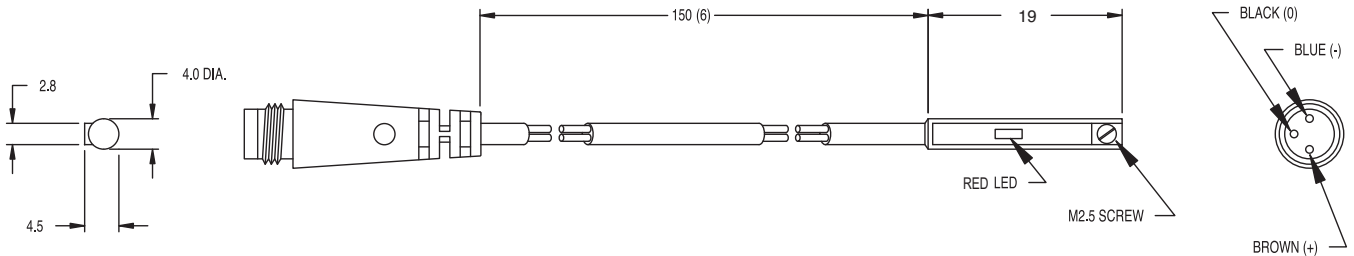


(shown with Quick Disconnect Option)

- Low cost and compact size
- Single LED indicator for signal
- Circuit protection/surge and polarity
- High-flex robotic grade cable with 4.8mm (3/16") bend radius.
- CE compliant / IP67 and NEMA 6 rated

Notes: PS denotes 150mm lead
-3 denotes 3m lead

Part no.	Sensor Type	Cord Type	Lead	
			1m	3m
WSKLRPS	NPN (sinking)	Quick Disconnect		
WSKLR	NPN (sinking)	Flying	4	
WSKLR-3	NPN (sinking)	Flying		4
WSCLRPS	PNP (sourcing)	Quick Disconnect		
WSCLR	PNP (sourcing)	Flying	4	
WSCLR-3	PNP (sourcing)	Flying		4
WRS	REED	Flying	4	
WRS-3	REED	Flying		4



Notes: All dimensions are in millimeters (inches). WS_LR, WS_LR-3 have flying leads.

Sensor Specifications

Parameters	Compact® Round Limit Sensors	
	NPN (sinking)	PNP (sourcing)
Part Number	WSKLR	WSCLR
Circuit Protection	Reverse Polarity/Surge Suppression	
Environmental Certifications	IP67, NEMA 6	
Wire Type	Black Polyurethane Jacket, PVC Insulation	
Housing Material	Plastic	
Housing Color Code	Black	
Shock Resistance	50G max	
Vibration Strength	9G max	
Operating Voltage	5 - 24 VDC	
Current Consumption	7 mA (24V) max	9 mA (24V) max
Switching Current	50 mA max	
Voltage Drop	.5V max @ 25 mA	1.2 V max @ 25 mA
Operating Frequency	1 KHz max	
Switch Logic	Sinking (Normally Open)	Sourcing (Normally Open)
LED Function	RED (Switch Active)	
Operating Temperature	-20° to 70°C	

***WARNING:** Never Exceed Rating (Watts = Voltage x Amps) Power Rating*: 1.5 watts

NOTE: ALL SENSORS SOLD SEPARATELY.

Sensor Options

Optional Quick Disconnect Sensor Cable *with threaded, sealed connectors*

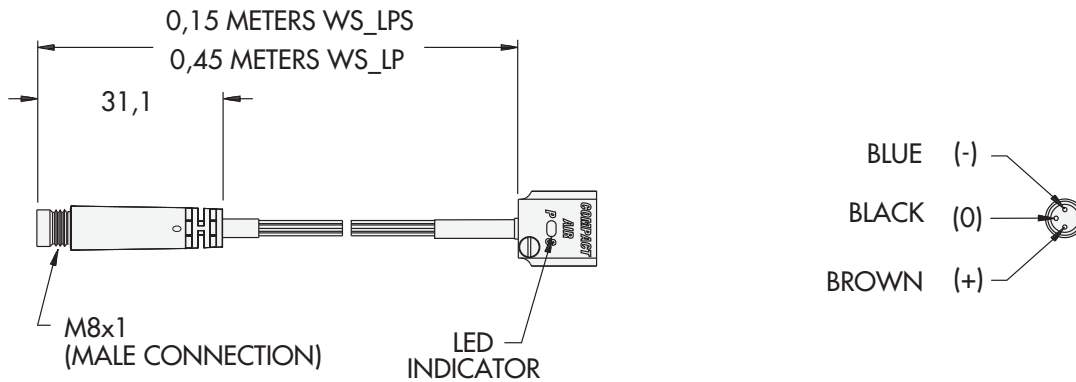
Part Number - Specify **K** or **C**

WS_LP **WS_LPS**

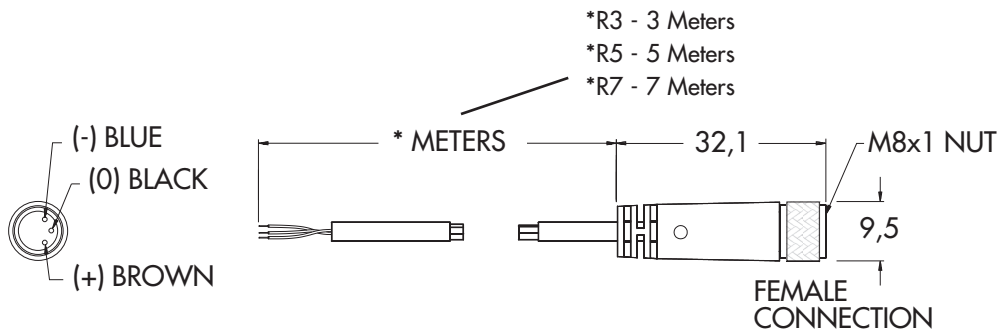
Plug - 3 Prong

3 Prong Plug

#WSKLP, #WSCLP, #WSKLPS, #WSCLPS



Receptacle 3 - Socket



3 Socket Mating Cable

For use with:

#WSKLP, #WSCLP, #WSKLPS, #WSCLPS,

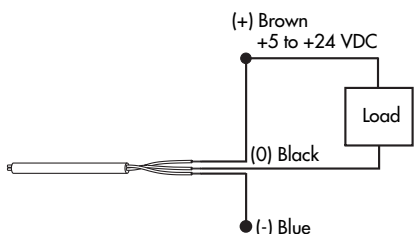


Part Number
R3
R5
R7

Sold Separately

Wiring Diagrams and Definitions (for units with flying leads)

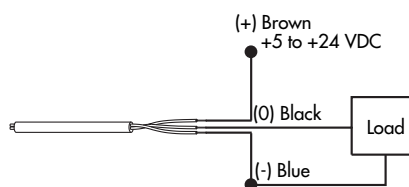
NPN Output Sinking (K)



- Ideal for complex controls utilizing multiple power supplies.

A “sinking” output sensor complete a circuit by connecting the load to ground. Sinking output sensors in a sequence can have different supply voltages. The ground is their common factor.

PNP Output Sourcing (C)



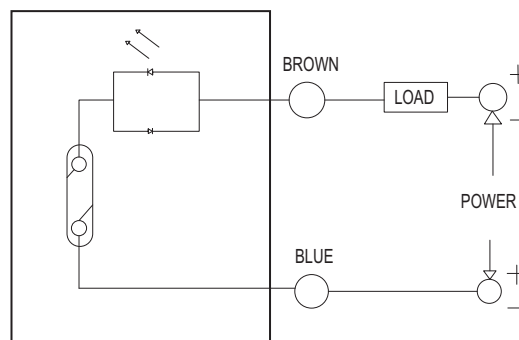
- Ideal for single power supply applications.

A “sourcing” output sensor completes a circuit by connecting the load to the supply current. All sourcing output sensors must have the same supply voltage.

Reed Sensor Specifications

Parameters	Compact® Round Limit Sensors
	REED SWITCH
Part Number	WRS
Operating Voltage	5 - 120 V DC/AC 50/60 Hz
Switching Current	50 mA max
Voltage Drop	2.5 V max
Operating Frequency	1 KHz max
Switch Logic	SPST Normally Open
LED Function	Red
Circuit Protection	None
Environmental Certifications	IP67, NEMA 6
Cable	Black/Gray
Magnetic Requirement	50 Gauss Parallel
Temperature Range	14 to 158°F (-10 to +70°C)
Shock/Vibration	30G/9G
Power Rating*	6 Watts

Circuit and Connect Diagram



NOTE: ALL SENSORS SOLD SEPARATELY.

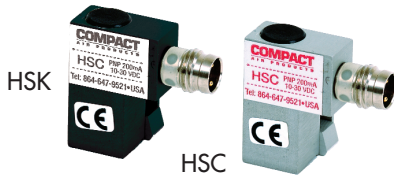
Husky[®] Limit Sensors

- Rugged design for harsh environments
- Weld field interference immunity
- Extra secure mount with socket head cap screw
- Threaded connector on housing
- Impact resistant
- LED indicator
- Reverse polarity protection
- CE compliant / IP67 rated
- 200mA switching current
- Better suited for large Compact[®] cylinders

NOTE: This universal sensor is used for all Compact cylinders, inch or metric. Inch and metric sold separately, not installed.

Part No.	Sensor Type (Wiring diagrams and definitions on page 5)	Cord Types
		Quick Disconnect
HSK	NPN (sinking)	✓*
HSC	PNP (sourcing)	✓*

*Mating 3 socket receptacle available, part # R3
"3" denotes 3 meter cable

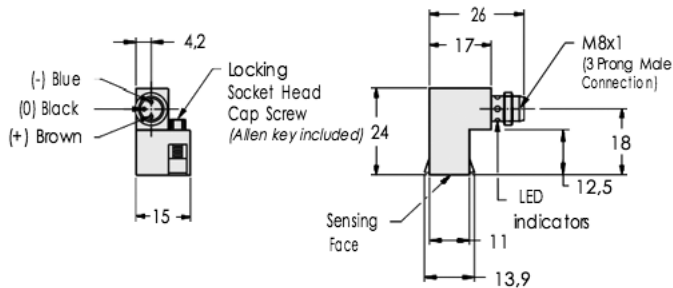


Dimensional Information

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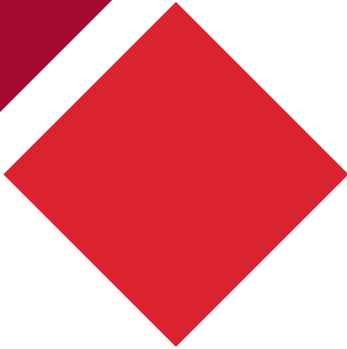
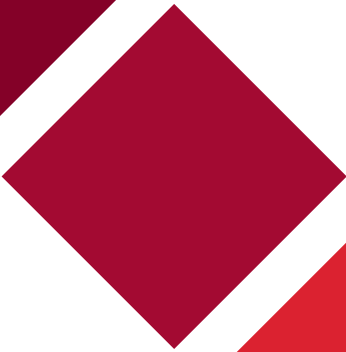
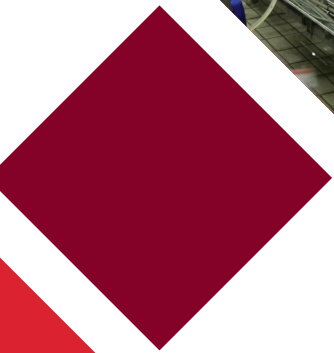
HS_

Husky Sensors are manufactured with a quick disconnect option. See page 3 for the mating 3 meter socket receptacle.



Weld Field Data		
Rated Field Strength Hn	[kA/m]	1.2
Assured Field Strength Ha	[kA/m]	>2
Maximum Noise Field Strength	[kA/m]	<200
Noise Field Frequency	[Hz]	50..60
Differential Travel H	[% of Hn]	<45
Ambient Temperature Range Ta	[°C]	-25..70
Temperature Drift	[% of Hn]	<0.3

Specifications		
Parameters	Husky Limit Sensors	
	NPN (sinking)	PNP (sourcing)
Part Number	HSK	HSC
Operating Voltage	5-24 VDC	
Current Consumption	25mA (at 24V) 80uA (at 24V)	
Switching Current	200mA Max	
Voltage Drop	3.1 V Max @ 200mA	
Operating Frequency	<1Hz	<10Hz
Switch Logic	Sinking, Normally Open	Sourcing, Normally Open
LED Function	Red (Switch Active)	
Operating Temperature	-25°C to 70°C	
Circuit Protection	Reverse Polarity	
Environmental Certifications	IP67	
Wire Type	NA	
Housing Material	Anodized Aluminum	
Housing Color Code	Black	Silver
Wire Field Immunity	Standard	



COMPACT[®]
AUTOMATION PRODUCTS

Compact Automation Products, LLC
105 Commerce Way
Westminster, SC 29693
Tel: 864.647.9521
Fax: 864.647.9574
www.compactautomation.com

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