

ORDERING PROCEDURE AND TECHNICAL DATA



1 FILL IN 4 BLANK SPACES TO SELECT A SWITCH AND TO CREATE ITS PART NUMBER A S

R	REED SWITCH
H	HALL SWITCH
O	SWITCH with permanent 9 foot cable
3	SWITCH ONLY with 8mm male quick connect

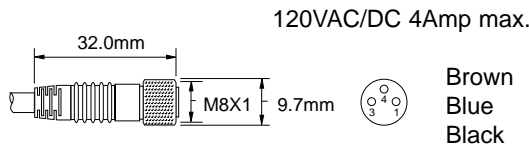
TYPE CODE	DESCRIPTION	FUNCTION	SWITCHING VOLTAGE	SWITCHING CURRENT	SWITCHING POWER	SWITCHING SPEED	VOLTAGE DROP
02	Reed Switch for PLC's w/ LED	SPST Normally Open	5 - 120 VDC/VAC 50/60 Hz	0.03 Amp Max. 0.001 Amp Min.	4 Watts Max.	0.5 ms operate 0.1 ms release	3.5 Volts
31	Electronic Hall Sensor, LED, Sourcing	Normally Open PNP output	6 - 24 VDC	0.5 Amp Max.	12 Watts Max.	1.5 μ s operate 0.5 μ s release	1.0 Volts
32	Electronic Hall Sensor, LED, Sinking	Normally Open NPN output	6 - 24 VDC	0.5 Amp Max.	12 Watts Max.	1.5 μ s operate 0.5 μ s release	1.0 Volts

2 SELECT A SWITCH MOUNTING CLAMP To securely fasten any switch to the cylinder tube choose the proper size stainless steel band clamp from the table below

CYLINDER BORE SIZE	CLAMP PART NUMBER
3/4"	750CLAMP
1 1/8"	112CLAMP
1 1/2"	150CLAMP
2"	200CLAMP
3"	300CLAMP

ORDER SEPARATELY - NOT INCLUDED WITH SWITCH

3 SELECT A QUICK CONNECT CABLE IF REQUIRED Cable part No. ARC130 fits any Aurora switch with 8mm male quick connect and is 16 feet long



Poles -	3 pole	Nominal Volt. Rating -	60 VAC / 75 VDC
Materials -		Environmental Resistance -	IP67
Cable -	Black PUR or PVC	Current Rating -	4 Amps
Housing -	Nylon	Insulation Resistance -	$\geq 10^{10} \Omega$
Contact Finish -	Au	Contact Resistance -	$\leq 5m\Omega$
Male Contact -	Cu Zn	Temperature Rating -	-25° to 85°C
Female Contact -	Cu Sn	Wire Gauge -	.25mm ² wire / 24 AWG

4 SELECT MAGNETIC PISTON When ordering a cylinder along with a switch be sure to include a magnetic piston on the cylinder – see next page.

MAGNETIC PISTON

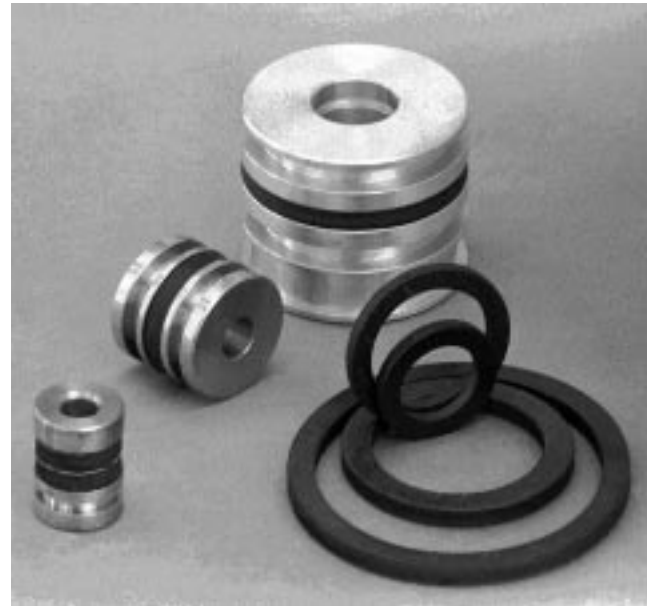
Add this option to your cylinder to operate Aurora reed or hall switches

Flexible Nitrile based permanent magnets are suitable for pneumatic and hydraulic service -20°F to $+180^{\circ}\text{F}$.

Aurora piston magnets are made from high energy material and sufficient mass to create a strong stable magnetic field parallel to the cylinder axis.

All magnets are impact resistant and will retain maximum strength indefinitely.

Magnetic pistons are available in all series Aurora cylinders. They are compatible with most options and usually add 1/2" to cylinder length. Consult ordering procedure options for your choice.



BREATHER VENTS, MUFFLERS, SPEED CONTROLS

Breather Vent



PART	NPT	HEX	LENGTH
ABV-1	1/8	7/16	7/16
ABV-2	1/4	9/16	5/8

Aurora breather vents can be used to vent single acting cylinders gear boxes, etc. where contamination from foreign particles is a problem. The vent is made of sintered bronze fitted to a brass body, and is rated at 40 microns. Threaded construction allows easy removal for cleaning.

Exhaust Muffler



PART	NPT	HEX	LENGTH
AM-1	1/8	7/16	1 1/8
AM-2	1/4	9/16	1 3/8

These muffler-filters utilize porous sintered bronze bonded to copper plated steel bodies, and are used to silence exhaust air from the port of cylinders, valves, air tools, etc. The standard filter is rated at 40 microns, and may be removed for cleaning.

Speed Control Muffler



PART	NPT	HEX	LENGTH CLOSED	LENGTH OPEN
ASC-1	1/8	9/16	1 3/8	2
ASC-2	1/4	5/8	1 9/16	2 3/16

These units provide an infinite variation of metered air flow at an acceptable sound level on exhaust ports of air valves, cylinders, etc. The operating speed of cylinders or air tools may be varied with the adjusting screw, which is locked in place with a locknut. The standard unit contains a 40 micron bronze element on a brass body.

Hall Effect and Reed Switch Magnetic Sensors

Aurora quality American made switches with broad spectrum application and durability

One Series of switches fits all Aurora cylinders

All switches have a corrosion and moisture resistant 300 series stainless housing with translucent inert plastic cover and epoxy filled circuit board. Nema 6 rated for wet environments

LED indicator light shows same brightness throughout voltage range

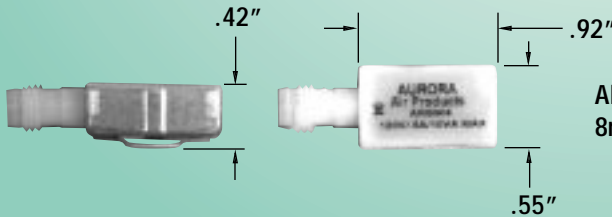
Hall switches are completely solid state with no moving parts making them shock and vibration resistant

Reed switches operational to 30g (11msec) shock and 20g (10-55hz) vibration

Operational from 0° to 170° F

Both reed and hall switches work with the same magnet. 85 Gauss required at cylinder O.D. See page 86

Stainless band clamp fastens the switch to any cylinder. Not included with switch - order separately



All housings have the same slim profile 8mm male quick connect model shown

Cable

Part number ARC130 quick connect cable connects to any switch that has the 8mm male quick connect thread

Not included with switch - order separately

Extra long 16 foot length

