

# Switches

W/G SIZE	FREQ. RANGE GHz	BASIC MODEL NO.	NO. OF PORTS <sup>2</sup>		FLANGE TYPE <sup>8</sup>		ISOL. MIN.	VSWR MAX.	INS. LOSS MAX.	RF CHARACTERISTICS <sup>3</sup> RF POWER MAX. KW	SWITCH TIME (ms) <sup>4</sup>	OPER VOLT <sup>5</sup>			MECH DIM
			3	4	COVER	CHOKE						28V DC	50V DC	110V AC	
WR28	26.50-36.00	28SR16	YES	YES	YES	S/O	50	1.10:1	0.10	22	100	STD	N/A	N/A	FIG. 1
WR42	18.00-26.50	42SR16	YES	YES	YES	S/O	50	1.10:1	0.10	43	100	STD	S/O	S/O	FIG. 2
WR62	12.40-18.00	62SR36	YES	YES	YES	YES	60	1.10:1	0.10	120	100	STD	S/O	S/O	FIG. 3
WR90	8.20-12.40	90SR36	YES	YES	YES	YES	60	1.10:1	0.15	200	100	STD	S/O	S/O	FIG. 4
	8.20-12.40	90SR56	YES	YES	YES	YES	60	1.10:1	0.10	200KW/13KW Av.	100	STD	S/O	S/O	FIG. 5
WR102	7.05-11.00	102SR26	YES	YES	YES	YES	60	1.10:1	0.10	275	100	STD	S/O	S/O	FIG. 5
WR112	7.05-10.00	112SR36	YES	YES	YES	YES	60	1.10:1	0.10	350	100	STD	S/O	S/O	FIG. 5
WR137	5.80-8.20	137SR16	YES	YES	YES	-	60	1.10:1	0.10	560	150	STD	S/O	S/O	FIG. 6
WR187	3.95-5.85	187SR16	YES	YES	YES	YES	60	1.10:1	0.10	1,400	150	STD	S/O	S/O	FIG. 7
WR284	2.60-3.95	284SR16	YES	YES	YES	YES	60	1.10:1	0.10	2,200	150	STD	S/O	S/O	FIG. 8

## Double Ridged Waveguide Switches

WRD750	8.00-16.00	D750SR16	YES	YES	YES	-	50	1.2:1	0.30	33.5	100	STD	S/O	S/O	FIG. 9
WRD475	4.75-11.00	D475SR16	YES	YES	YES	-	50	1.3:1	0.30	83.7	100	STD	S/O	S/O	FIG. 10
WRD180	18.00-39.00	D180SR16	YES	YES	YES	-	40	1.6:1	0.70	5.8	100	STD	S/O	S/O	FIG. 11
WRD19	4.75-11.00	D19SR16	YES	YES	YES	-	50	1.3:1	0.30	33.5	100	STD	S/O	S/O	FIG. 12

KEY: S/O = Special order  
 N/A = Not available  
 STD = Standard  
 YES = Available as a standard option

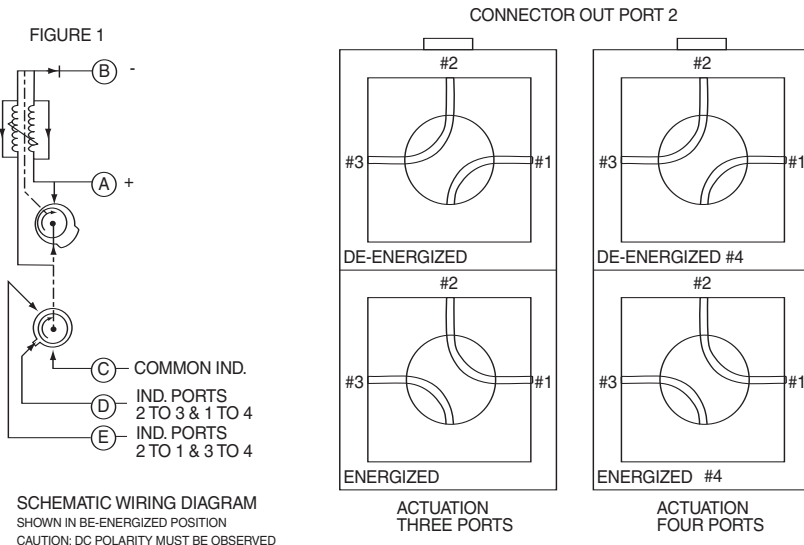
All switches have a normal life of 100,000 cycles, but long life up to 500,000 cycles is available on special order.

All switches meet requirements of MIL-E-5400.

- In fail-safe version the rotor returns to the initial position when current is removed. Holding current is required to keep the rotor in energized position.
- Three port switch is SPDT. Four port switch is DPDT. (Transfer).
- All switches can be pressurized to 45 PSI. the power shown is without pressurization. Typically 1.0 cu cm/min. leak rate.

- Defined as the time from application of the switching current until specified RF performance is reached in the 90° position.
- Current required for fail-safe type is 1.2 at 25°C for actuation and 0.5A at 25°C for hold WR137 thru WR284 2.0A. actuating. All AC drive circuits have diode limiters unless otherwise specified.
- See figure 1 on next page for indicating circuit. All DC connectors are Bendix PT02H-10-6P, unless otherwise specified.
- All switches are of aluminum construction with a chromate finish. Unless otherwise specified all switches are painted with a semi-gloss blue paint per FED-STD-595.
- Flanges conform to MIL-F-3922.
- Isolation greater than specified on special order.

# Indicating Circuits



SWITCHING SEQUENCE AS VIEWED FROM TOP