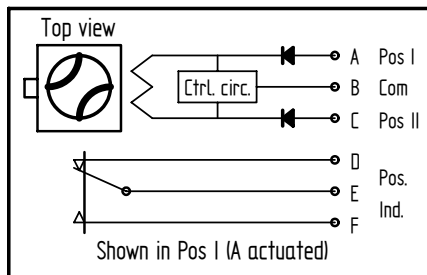
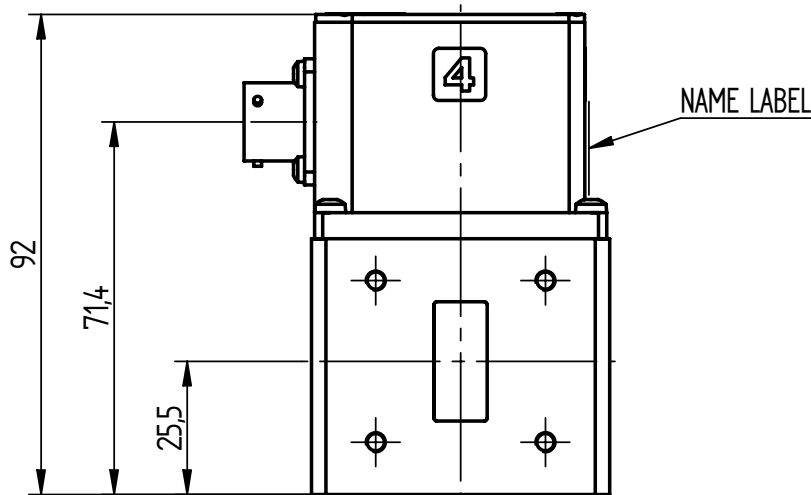
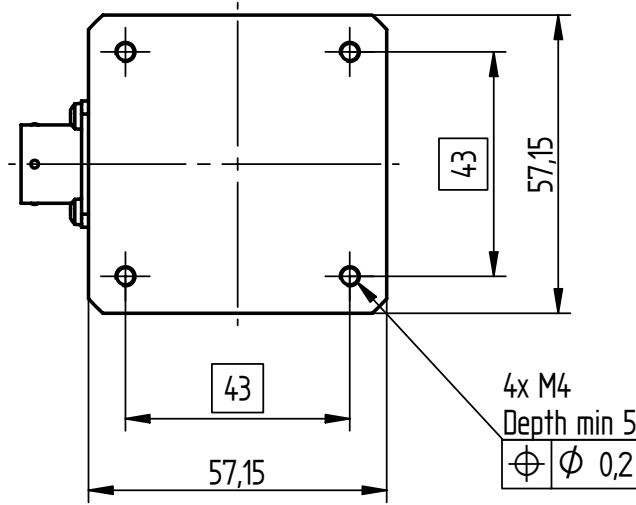
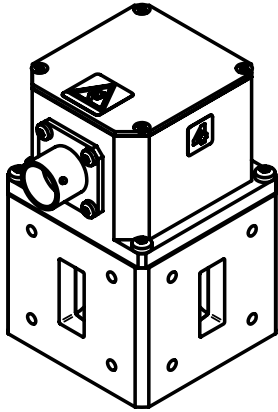


Issue	Modification			Date	Sign.	Chkd.
B	ECO			2003-1016	HNg	HW



CAUTION!
ESD SENSITIVE

Drawing principle	SS 1902	UNLESS OTHERWISE STATED THE FOLLOWING APPLIES: General tolerances, linear and angular dimensions: ISO 2768-c ⚠ ⚙ Europ. proj.	Ref.	020806	Sign.	CEL
Tolerancing principle	ISO 8015		Chkd.		Sign.	HW
Dimensions in mm			Appvd.		Sign.	HW
	Title WAVEGUIDE SWITCH WR90/R100/WG16 Latching		Designed		Sheet	1 (2)
			Scale	1:15	Issue	B
			Doc. no.	WS8086X/00		

Reference HNg	Approved <i>HW</i>	Origin date 2002-08-06	Issue date 2003-11-03	Issue B	Page 2 (2)	Document WS 8086X/00
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RF DATA

Frequency range	8.2 – 12.4 GHz
VSWR	1.08
Insertion loss	0.1 dB
Isolation	90 dB
Peak power	250 kW at 0.1 MPa abs., +25°C
Average power	3 kW
Flange interface	MIL-DTL-3922/53D-016 modified with M4, thread depth min 5

ACTUATOR DATA

Operating voltage	28±3 V DC
Operating current	1 A
Switching time	300 ms, Self cut off
Duty (min time between successive operations)	500 ms -40°C to +40°C linearly increasing to 2 s at +85°C
Connector	MS 3112E 10-6P
Mating connector	MS 3116F 10-6S or eq.

POSITION INDICATOR

Voltage / Current	30 V Max, 100 mA Max Resistive load
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MECHANICAL DATA

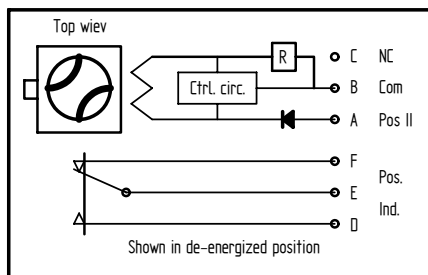
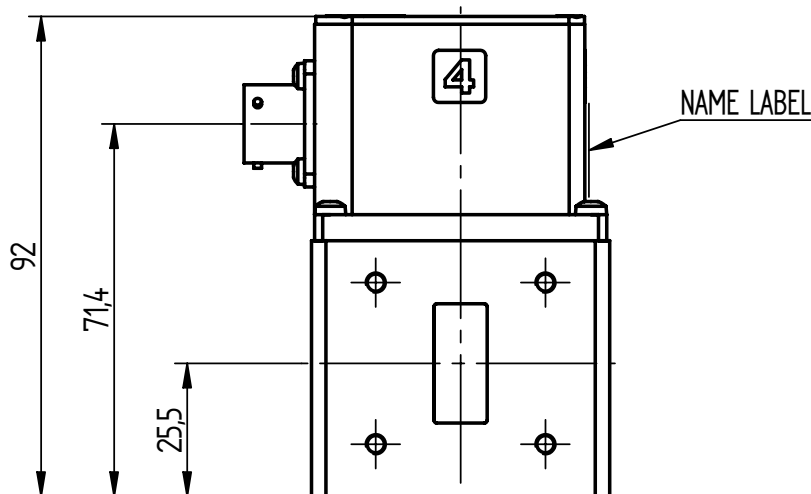
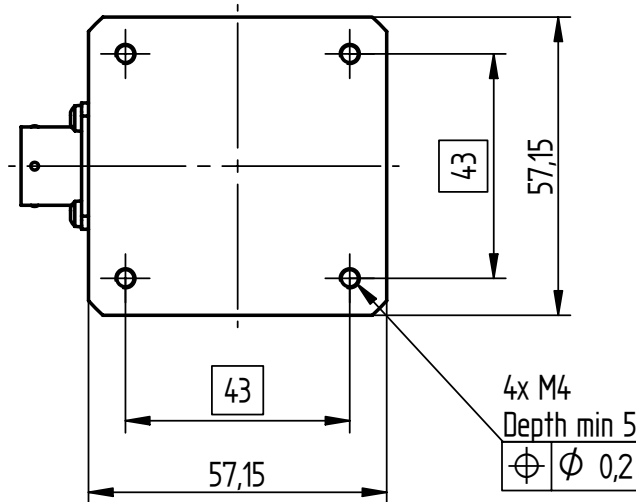
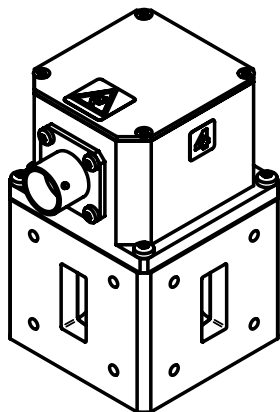
Material	Aluminium alloy, Cu free
Finishing	Chromate per MIL-C-5541 and black painted
Air pressure	0.1 MPa overpr. Max
Air leakage	10 cm ³ /min (0,1 MPa overpr.) Max
Weight	0.5 kg Max
Life	250 000 actuations

ENVIRONMENTAL DATA

Ambient temperature	-40°C to +85°C
Vibration	5 – 18 Hz, 3 mm amplitude 18 – 2000 Hz, 15 g
Humidity	100%RH if dry air in waveguide

CAD-dokument
Får ej revideras manuellt

Issue	Modification	Date	Sign.	Chkd.



CAUTION!
ESD SENSITIVE

Drawing principle	SS 1902	UNLESS OTHERWISE STATED THE FOLLOWING APPLIES: General tolerances, linear and angular dimensions: ISO 2768-c ⊕ ∅ Europ. proj.	Ref. 2003-1112	Sign. HNg	
Tolerancing principle	ISO 8015		Chkd.	Sign. HW	
Dimensions in mm			Appvd.	Sign. HW	
	Title WAVEGUIDE SWITCH WR90/R100/WG16 Fail-safe	Designed	Sheet	1 (2)	
		Scale	1:1,5	Issue	B
		Doc. no.	WS8087X/00		

Reference HNg	Approved <i>HW</i>	Origin date 2002-08-06	Issue date 2003-11-03	Issue B	Page 2 (2)	Document WS 8087X/00
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RF DATA

Frequency range	8.2 – 12.4 GHz
VSWR	1.08
Insertion loss	0.1 dB
Isolation	90 dB
Peak power	250 kW at 0.1 MPa abs., +25°C
Average power	3 kW
Flange interface	MIL-DTL-3922/53D-016 Modified with M4, thread depth min 5

ACTUATOR DATA

Operating voltage	28±3 V DC
Operating current	1 A, Auto switch on to holding current after 200 ms
Holding current	300 mA
Switching time	300 ms, Self cut off
Duty (min time between successive operations)	500 ms -40°C to +40°C linearly increasing to 2 s at +85°C
Connector	MS 3112E 10-6P
Mating connector	MS 3116F 10-6S or eq.

POSITION INDICATOR

Voltage / Current	30 V Max, 100 mA Max Resistive load
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MECHANICAL DATA

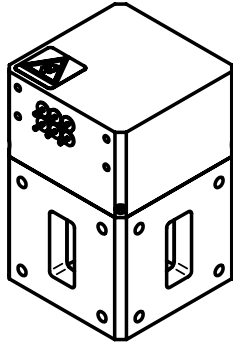
Material	Aluminium alloy, Cu free
Finishing	Chromate per MIL-C-5541 and black painted
Air pressure	0.1 MPa overpr. Max
Air leakage	10 cm ³ /min (0.1 MPa overpr.) Max
Weight	0.5 kg Max
Life	250 000 actuations

ENVIRONMENTAL DATA

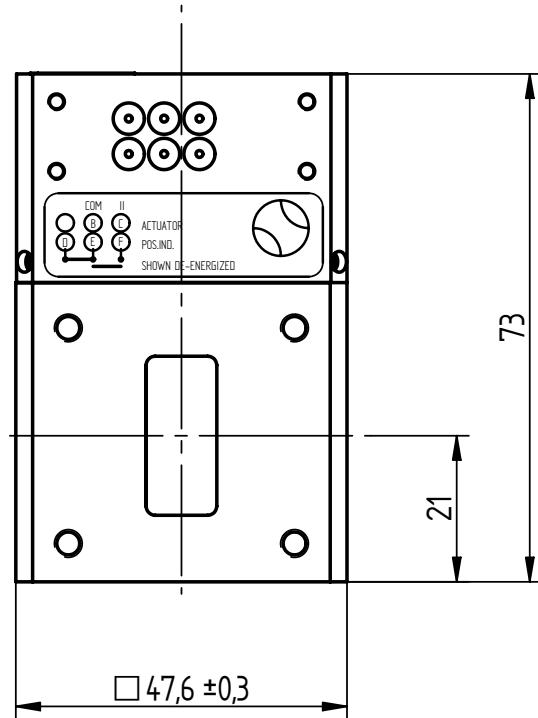
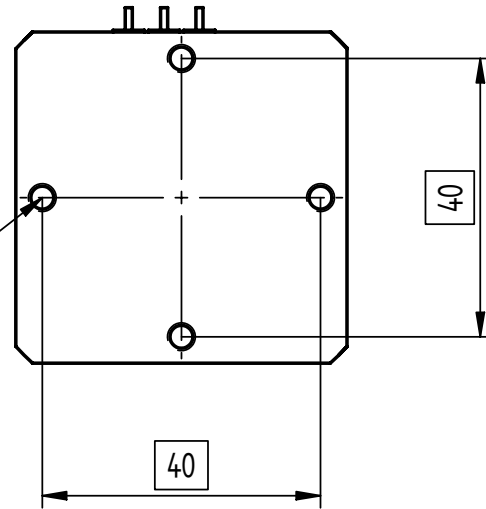
Ambient temperature	-40°C to +85°C
Vibration	5 – 18 Hz, 3 mm amplitude 18 – 2000 Hz, 15 g
Humidity	100%RH if dry air in waveguide

CAD-dokument
Får ej revideras manuellt

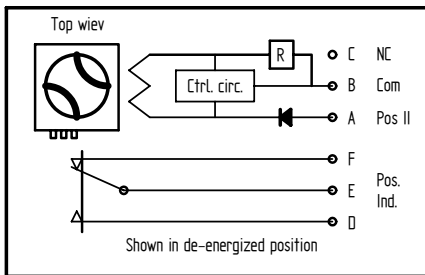
Issue	Modification				Date	Sign.	Chkd.
B	ECO				2004-04-26	HNg	HW



4x M4
Depth min 5
 $\begin{matrix} \oplus & \ominus \\ \oplus & \ominus \end{matrix} \quad \phi \quad 0,2$



CAUTION!
ESD SENSITIVE



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Drawing principle	SS 1902	UNLESS OTHERWISE STATED THE FOLLOWING APPLIES: General tolerances, linear and angular dimensions: ISO 2768-c Europ. proj.	Ref. 03-11-19	Sign. HNg
Tolerancing principle	ISO 8015		Chkd.	Sign.
Dimensions in mm			Appvd.	Sign.
	Title		Designed	Sheet 1(2)
	WAVEGUIDE SWITCH WR90/R100/WG16 Fail-safe		Scale 1:1	Issue C
			Doc. no. WS8088X/00	

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E

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Reference	Approved	Origin date	Issue date	Issue	Page	Document
HNg	HW	1997-09-12	2004-04-26	C	2 (2)	WS 8088X/00

RF DATA

Frequency range	8.2 – 12.4 GHz
VSWR	1.08
Insertion loss	0.1 dB
Isolation	60 dB
Peak power	250 kW at 0.1 MPa abs., +25°C
Average power	3 kW
Flange interface	MIL-DTL-3922/53D-016 Modified with M4, thread depth min 5

ACTUATOR DATA

Operating voltage	28±3 VDC
Operating current	1 A, Self cut off
Holding current	0.3 A
Switching time	150 ms
Duty (min time between successive operations)	500 ms -40°C to +40°C linearly increasing to 2 s at +85°C
Connector	Soldering pins

POSITION INDICATOR

Position indicator current	60 V Max, 50 mA Max Resistive load
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MECHANICAL DATA

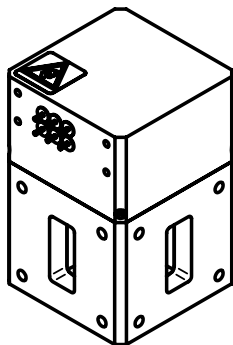
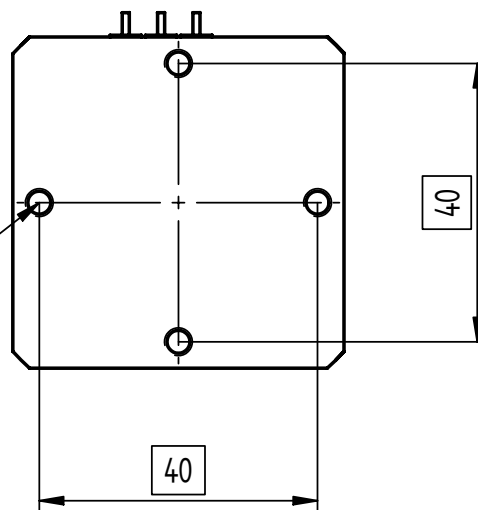
Material	Aluminium alloy, Cu free
Finishing	Chromate per MIL-C-5541 and black painted
Air pressure	0.1 MPa overpr. Max
Air leakage	10 cm ³ /min. (0.1 MPa overpr.) Max
Weight	0.35 kg Max
Life	250 000 actuations

ENVIRONMENTAL DATA

Ambient temperature	-40°C to +85°C
Vibration	5 – 18 Hz, 3 mm amplitude 18 – 2000 Hz, 15 g
Humidity	100%RH if dry air in waveguide

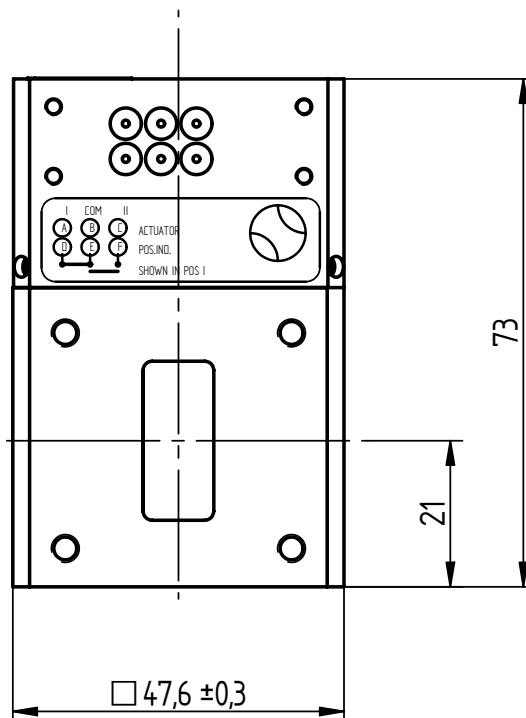
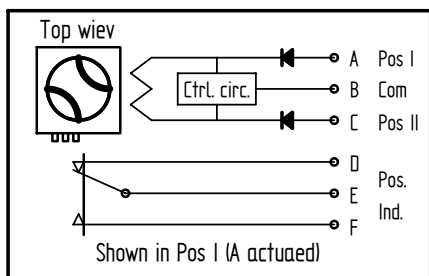
CAD-dokument
 För ej revideras manuellt

Issue	Modification	Date	Sign.	Chkd.
D	ECO	2004-0426	HNg	HW


 4x M4
 Depth min 5
 $\begin{matrix} \oplus \\ \oplus \end{matrix} \quad \begin{matrix} \oplus \\ \oplus \end{matrix} \quad 0,2$


CAUTION!
 Never connect supply voltages
 to pins A and C simultaneously.
 Severe damage will result.

CAUTION!
 ESD SENSITIVE



Drawing principle	SS 1902	UNLESS OTHERWISE STATED THE FOLLOWING APPLIES: General tolerances, linear and angular dimensions: ISO 2768-c $\begin{matrix} \triangle \\ \oplus \end{matrix}$ Europ. proj.	Ref. 03-11-19	Sign. HNg
Tolerancing principle	ISO 8015		Chkd.	Sign.
Dimensions in mm			Appvd.	Sign.
	Title		Designed	Sheet 1(2)
	WAVEGUIDE SWITCH WR90/R100/WG16 Latching		Scale 1:1	Issue D
			Doc. no. WS8089X/00	

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Reference	Approved	Origin date	Issue date	Issue	Page	Document
HNg	HW	1997-09-12	2004-04-26	D	2 (2)	WS 8089X/00

RF DATA

Frequency range	8.2 – 12.4 GHz
VSWR	1.08
Insertion loss	0.1 dB
Isolation	60 dB
Peak power	250 kW at 0.1 MPa abs., +25°C
Average power	3 kW
Flange interface	MIL-DTL-3922/53D-016 Modified with M4, thread depth min 5

ACTUATOR DATA

Operating voltage	28±3 VDC
Operating current	1 A, Self cut off
Switching time	150 ms
Duty (min time between successive operations)	500 ms -40°C to +40°C linearly increasing to 2 s at +85°C
Connector	Soldering pins

POSITION INDICATOR

Position indicator current	60 V Max, 50 mA Max Resistive load
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MECHANICAL DATA

Material	Aluminium alloy, Cu free
Finishing	Chromate per MIL-C-5541 and black painted
Air pressure	0.1 MPa overpressure Max
Air leakage	10 cm ³ /min. (0.1 MPa overpr.) Max
Weight	0.35 kg Max
Life	250 000 actuations

ENVIRONMENTAL DATA

Ambient temperature	-40°C to +85°C
Vibration	5 – 18 Hz, 3 mm amplitude 18 – 2000 Hz, 15 g
Humidity	100%RH if dry air in waveguide

Reference HNg	Approved HW	Origin date 2002-11-19	Issue date 2003-11-05	Issue B	Page 2 (2)	Document WS 8189X/00
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RF DATA

Frequency range	8.2 – 12.4 GHz
VSWR	1.08
Insertion loss	0.1 dB
Isolation	60 dB
Peak power	250 kW at 0.1 MPa abs., +25°C
Average power	3 kW
Flange interface	MIL-DTL-3922/53D-016 Modified with M4, thread depth min 5

ACTUATOR DATA

Operating voltage	28±3 V DC
Operating current	1 A, Self cut off
Switching time	100 ms
Duty (min time between successive operations)	500 ms -20°C to +40°C linearly increasing to 2 s at +70°C
Connector	MS 3112E 14-19P
Mating connector	MS 3116F 14-19S or eq.

POSITION INDICATOR

Voltage / Current	30 V Max, 100 mA Max Resistive load
Position indicator	Three sets of C-form contacts and one set of inhibit contact, opened during VSWR >1.2

MECHANICAL DATA

Material	Aluminium alloy, Cu free
Finishing	Chromate per MIL-C-5541 and black painted
Air pressure	0.1 MPa overpr. Max
Air leakage	10 cm ³ /min (0.1 MPa overpr.) Max
Weight	0.45 kg Max
Life	250 000 actuations

ENVIRONMENTAL DATA

Ambient temperature	-20°C to +70°C
Vibration	5 – 18 Hz, 3 mm amplitude 18 – 2000 Hz, 15 g
Humidity	100%RH if dry air in waveguide