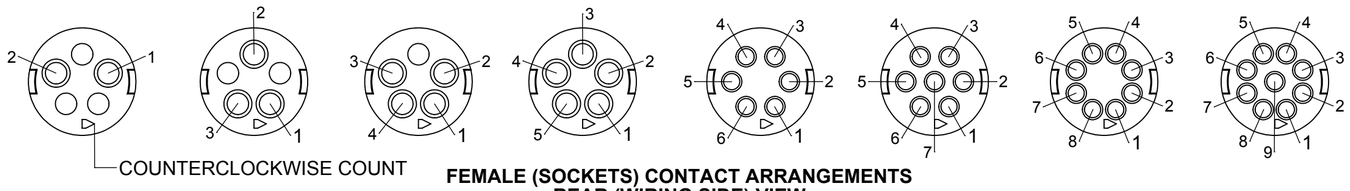
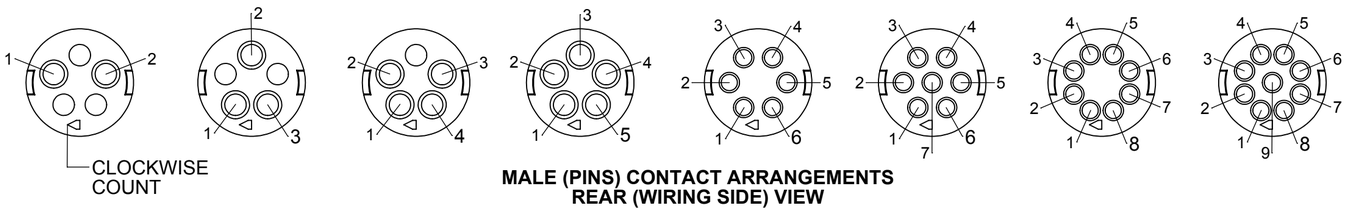
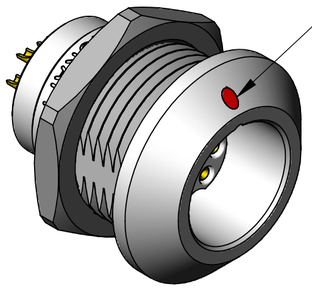


FEMALE (SOCKETS) CONTACT ARRANGEMENTS
REAR (WIRING SIDE) VIEW



MALE (PINS) CONTACT ARRANGEMENTS
REAR (WIRING SIDE) VIEW



HS2 P 7 F 26 - K

HS2 Series

Connector Type:
P - Panel, Front-Mount

# of contacts:
2-5 for #20
6-9 for #26

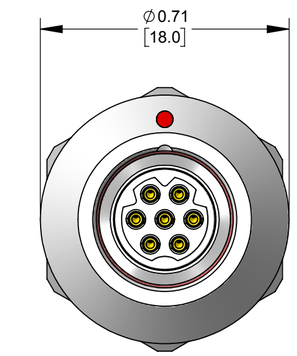
Gender:
M - Male (Pin)
F - Female (Socket)

Contact Size:
20 - 20, 22, 24, 26 AWG wires
26 - 26,28, 30 AWG wires

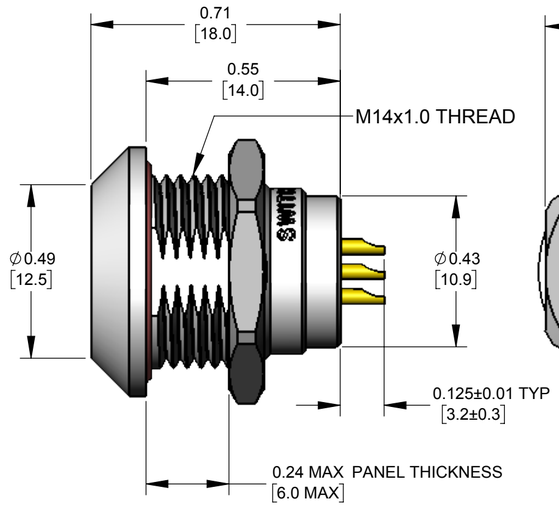
Options:
K - Kit Packaging (one unit/bag)
[blank] - Bulk Packaging
Consult factory for other options

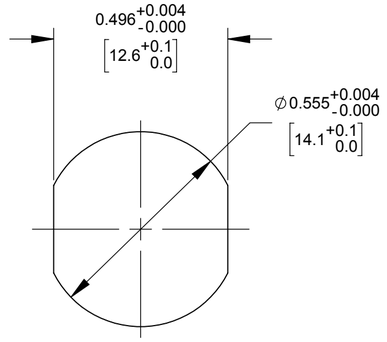
Refer to HS2C SERIES drawing for mating Cable-End connectors.
Refer to HS2L SERIES drawing for Cable-to-Cable connectors.

SPECIFICATIONS:	
MECHANICAL	
Mating / Locking Type:	Push-Pull automatic locking/unlocking
Life	5,000 cycles minimum
Operating Forces	10 lb. [44.5 N] maximum Insertion or Withdrawal
Vibration	Mil-Std 202G Method 201A
Panel-Mount Hex Nut Tongue	40 in-lb [4.5 Nm] maximum
Cable Securing System:	Threaded on metal Clamp
ELECTRICAL	
Voltage Rating	125 V AC/DC for 2-5 contact arrangements 30 V AC/DC for 6-9 contact arrangements
Current Rating	Refer to Current Carry Capacity Table
Insulation Resistance	1000 MΩ minimum
Contact Resistance	10 mΩ typical
EMI Shielding	360°
ENVIRONMENTAL	
Temperature Limits	-40ºC to +135ºC (-40ºF to +275°F)
Operating Temperature Range	Refer to Current Carry Capacity Table
Moisture Resistance	Mil-Std 202G Method 106G
Insulation Resistance	Mil-Std 202G Method 302
Thermal Shock	Mil-Std 202G Method 107G
Salt Atmosphere (Corrosion)	Mil-Std 202G Method 101E
Ingress Protection Ratings	IP66, IP67, IP68 (6 ft. for 24 hours) per IEC60529, NEMA 250 6P
MATERIAL	
Outer Shell Metal components	Copper Alloy, electroless nickel plated
Hex Nut & Inner Metal components	Copper Alloy, nickel plated
Ground Spring Washer	Stainless Steel
Electrical Insulator	Medical Technology LCP, natural
Seal O-rings	Silicone, red
Contacts	Copper Alloy, gold plated with Stainless Steel locking clip



HS2P7F26B SHOWN HERE





RECOMMENDED PANEL CUT-OUT

ALL DIMENSIONS FOR REFERENCE ONLY

Contacts	Wire (awg)	Current Rating (A) at Operating Temperature (°C)					Minimum Test Voltage (V rms)	Voltage (V rms) tested per UL2238
		45°C max.	65°C max.	85°C max.	100°C max.	110°C max.		
2 #20	20	10	9	8	7*	6	1400	125
	22	8.5	7.5	7.5	5.5*	4.5		
	24	7	6	5	4.5*	3.5		
	26	4	4	3.5	3.5*	2.5		
3 #20	20	9.5	8.5	7.5	6.5*	5		
	22	8	7	6	5*	4		
	24	6	5.5	4.5	4*	3		
	26	3.5	3.5	3	3*	2.5		
4 #20	20	9	8	7	6*	5		
	22	7.5	6.5	5.5	4.5*	3.5		
	24	5	4.5	4	3.5*	2.5		
	26	3	3	2.5	2.5*	2		
5 #20	20	8	7.5	6.5	5.5*	4.5		
	22	6.5	5.5	5	4*	3		
	24	4.5	4	3.5	3*	2.5		
	26	2.5	2.5	2	2*	1.5		
6-7 #26	26	2.5	2.5	2	2*	1.5	1000	30
	28	2	2	1.5	1.5*	1		
	30	1.5	1.5	1	1*	.5		
8-9 #26	26	2	2	1.5	1.5*	1		
	28	1.5	1.5	1	1*	.5		
	30	1	1	.5	.5*	.5		

*Temperature Rise does not exceed 30°C when tested according to UL2238. All other recommended current ratings are based on the Relative Thermal Index of the insulating material.

TOOL	TOOL TYPE	POSITIONER	CONTACT SIZE	WIRE SIZES
EN3CR	HAND CRIMP TOOL	EN2POS20	20 and 22	20 and 22 AWG
		EN3POS26	26	26, 28, and 30 AWG
EN3CRAUTO	PNEUMATIC CRIMP TOOL	EN2POS20	20 and 22	20 and 22 AWG
		EN3POS26	26	26, 28, and 30 AWG
EN2CRL	HAND CRIMP TOOL LARGE FRAME	EN2POS20L	20 and 22	20, 22, 24, and 26 AWG
EN2CRAUTOL	PNEUMATIC CRIMP TOOL LARGE FRAME			
INSTOOL20	CONTACT INSERTION	--	20	20, 22, 24, and 26 AWG
INSTOOL26		--	26	26, 28, and 30 AWG
REMTOOL20	CONTACT EXTRUCTION	--	20	20, 22, 24, and 26 AWG
REMTOOL26		--	26	26, 28, and 30 AWG

CUSTOMER DRAWING

REV	ECO NUMBER	DATE	BY	APVD
0B	INSTALLATION TOOLS CHANGE, INSTRUCTIONS UPDATE	04/22/16	PNK	SRC
0A	PRELIMINARY	01/06/16	PNK	SRC

REVISIONS

UNLESS OTHERWISE SPECIFIED
1. ALL DIMENSIONS IN INCHES [mm]
- TWO PLACE DECIMALS ±0.02 [0.5]
- THREE PLACE DECIMALS ±0.005 [0.13]

DO NOT SCALE DRAWING

THIS DRAWING DESCRIBES A DESIGN CONSIDERED PROPRIETARY IN NATURE, DEVELOPED AND MANUFACTURED BY SWITCHCRAFT INC. AND IS RELEASED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.

SIZE	WIDTH	MULT	LBS/M	TEMPER

FINISH
SPEC No.

MATERIAL
SPEC No.

FIRST USED ON

SCALE 3:1

DATE DRAWN	BY	CHKD	APVD
01/06/16	PNK	PNK 01/06/16	SRC 01/06/16

Switchcraft®

SHEET 1 OF 2

NAME FRONT PANEL-MOUNT HS2 SERIES CONNECTOR, RoHS

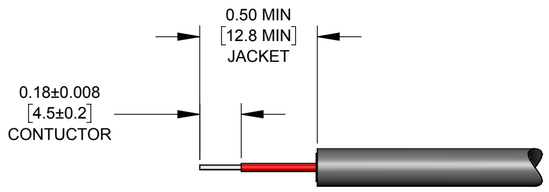
PART No. HS2P SERIES

REV 0B

SolidWorks CAD File

C

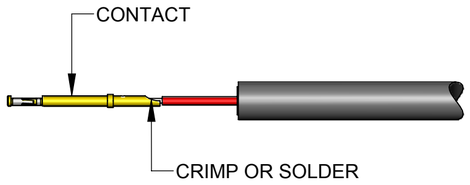
STEP 1



STRIP THE CABLE OR SINCLE CONDUCTORS AS SHOWN.

STEP 2

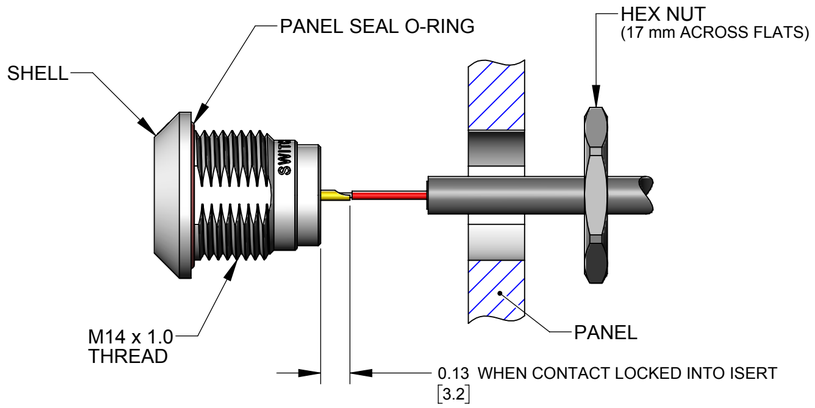
ONE CONTACT SHOWN HERE FOR CLARITY



CRIMP CONDUCTORS TO CONTACTS USING HAND OR PNEUMATIC CRIMP TOOL* WITH CRIMP POSITIONER* SET PER CONTACT SIZE AND WIRE GAGE.

IF SOLDERING, IT IS RECOMMENDED TO SOLDER CONDUCTORSTO CONTACTS BEFORE INSTALLATION.

STEP 3



INSTALL PANEL SEAL O-RING ONTO SHELL AS SHOWN.

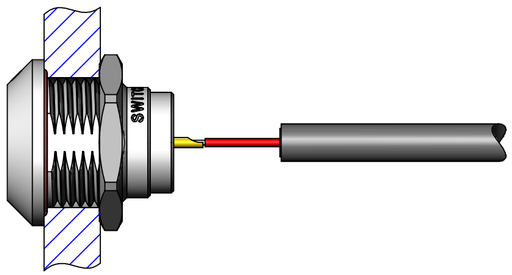
NOTE: CONVENIENTLY, CONTACTS CAN BE INSTALLED EITHER BEFORE OR AFTER SHELL INSTALLATION ON THE PANEL.

GUIDE EACH WIRED CONTACT INTO INSERT HOLE AND PUSH UNTIL CONTACT SNAPS IN PLACE. USE INSERTION TOOL* IF NECESSARY.

COLORED CONDUCTORS CAN BE ASSIGNED TO CONTACT POSITION NUMBERS AS DESIRED.

TO REMOVE A CONTACT, INSERT THE EXTRACTION TOOL* FROM THE FRONT OF INSERT AND LIGHTLY PRESS THE SPRING LOADED PLUNGER INWARD TO PUSH THE CONTACT OUT.

STEP 4



FINISHED ASSEMBLY

ALIGN AND INSTALL FINISHED CONNECTOR INTO PANEL CUT-OUT.
TIGHTEN HEX NUT TO A MAXIMUM OF 40 IN-LB [4.5 Nm] TORQUE.
A 17 mm WRENCH CAN BE USED.

*REFER TO TOOLS TABLE ON THIS DRAWING FOR SELECTION OF TOOLS PER CONTACT AND WIRE SIZE.

HS2 SERIES PANEL-MOUNT
FIELD ASSEMBLY INSTRUCTIONS

SCALE 2:1	Switchcraft®
DATE DRAWN 01/06/16	SHEET 2 OF 2
DRAWN BY PNK	PART No. HS2P SERIES_CD / REV 0B

SolidWorks CAD File C