

BIRNS *Aquamate™* LLC

CATALOGUE

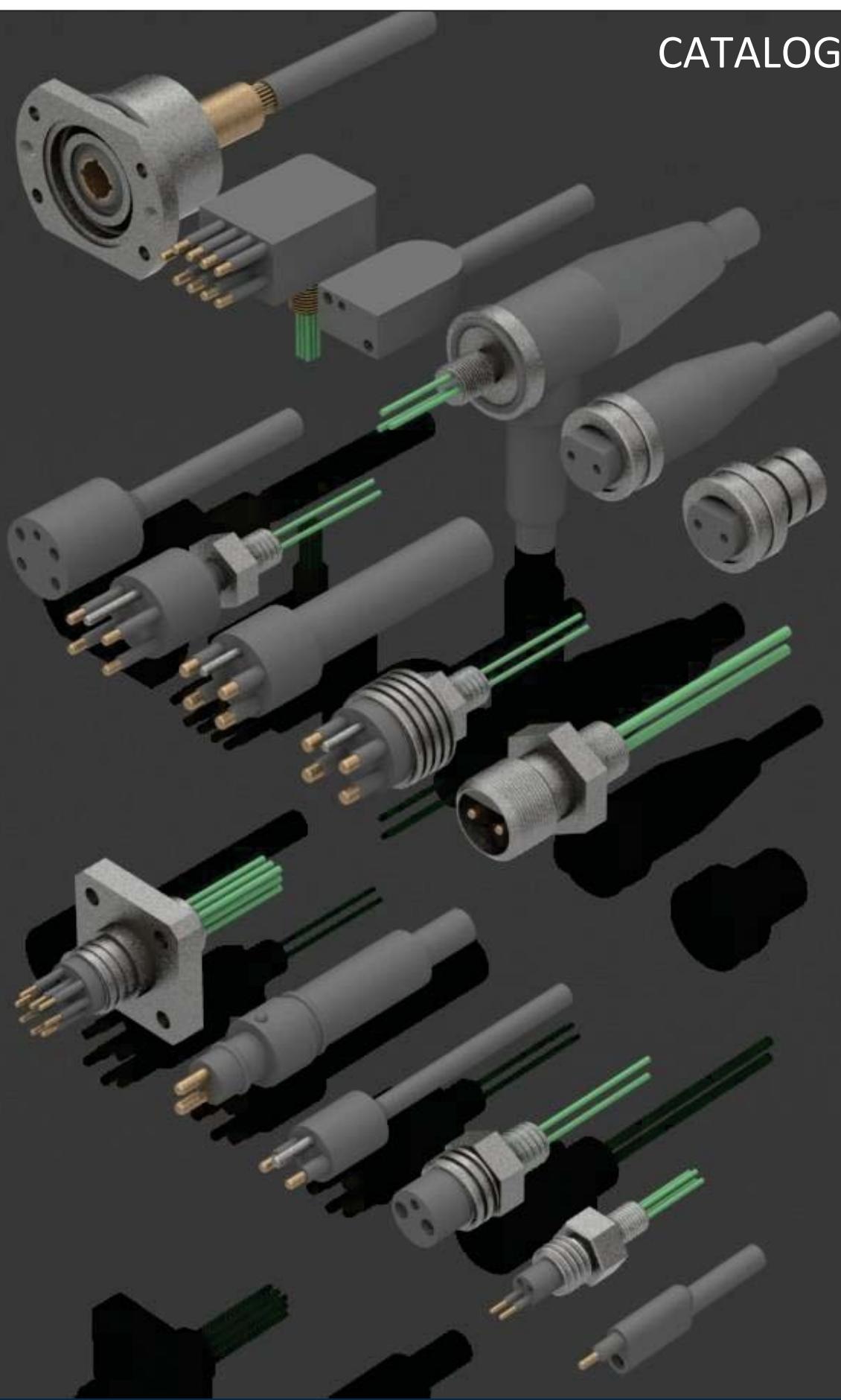


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Product Selection Guides

Select by number of contacts and gauge (AWG)

Contacts And Gauge (AWG) Selection Table															
		Number Of Contacts													
		1	2	3	4	5	6	7	8	9	10	12	13	16	20
A	2/0	300A													
	4	RFT													
	10		5500	5500		5500				5500					
	12	HD	HD	HD											
	14	5500	5500						5500			5500			
	16			5500		5500		5500		5500		5500		5500	
W	18	RM	RM FLAT LP MS2K*	RM FLAT LP MS2K*	RM SC	RM LP SC	LP	RM SC	LP	SC	SC		SC		
	20		NANO MH MS1.5K*	MS1.5K*	NANO MS1.5K*	FLAT MS1.5K* MC	MS1.5K* MC		FLAT MS1.5K* MC	MC	FLAT	MC		MC	

Note: *MS1.5K and MS2K are abbreviations of METAL SHELL 1500 and METAL SHELL 2000 respectively.

Select by maximum voltage and amperage rating

Volt And Ampere Selection Table								
		Max Amperage [A]						
		8	10	12	15	18	30	300
Max Volts [V]	300	FLAT	MC					300A
	600	HERMAPHRODITIC	SC	LP METAL SHELL RM	PN	5500	HD	

Select by cost

Cost Selection Table									
HERMAPHRODITIC									
	RM								
	FLAT								
	MC								
	LP								
	SC								
		HD							
			MS						
				PN					
					5500				
						300A			
more expensive →									

Select by size

Size Selection Table					
Larger ↓	Diameter Range [mm]		Length Range [mm]		Family
	Min	Max	Min	Max	
	8	41 hex	36	73.5	RM
	6.8x13.2 rect.	15 hex	24	22.5	HERMAPHRODITIC
	15.5	25.5	19	39	MC
	20X14.7 rect.	21x16 rect.	20.7	35	FLAT
	25	40.5	19	50	SC
	25	25	19	39	HD
	25x16 rect.	31.8x21.4 rect.	32	55	LP
	25	50.8 square	31.8	98.3	5500
	25.4	38	28.2	106	PN
	30 hex	44.4 square	27	48	MS
	66	66	72	72	300A

Note: See individual family for more specific size detailing

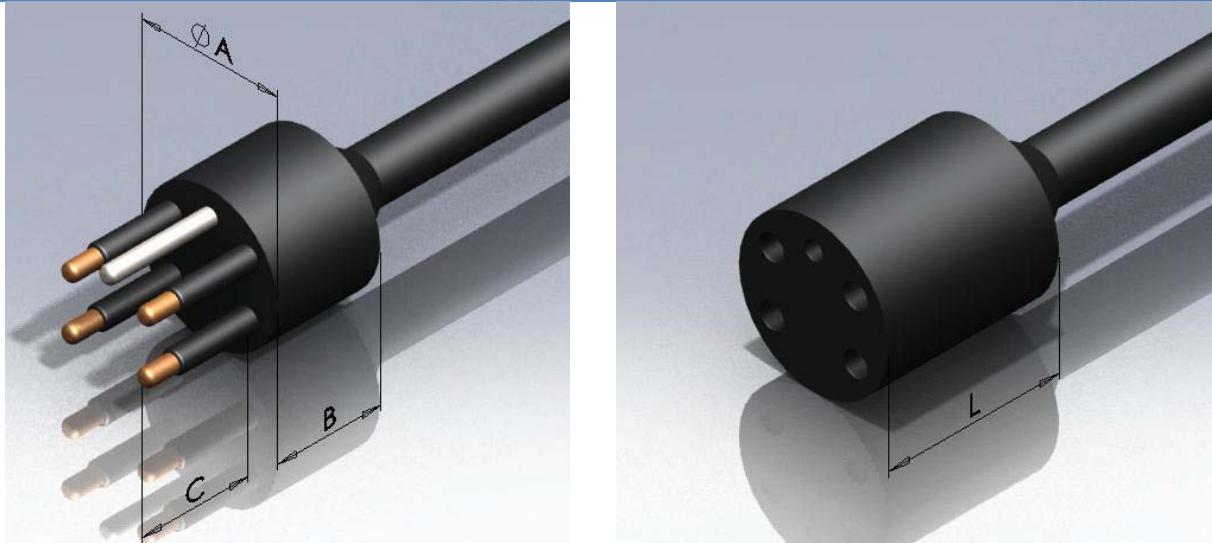
Select by bulkhead material

Bulkhead Material Selection Table					Family
Material					
Aluminum	Brass	316 Stainless	Titanium	PEEK	
C	S	A	A	C	SC
C	S	A	A	C	HD
C	S	A	A	C	MC
C	S	PA	PA	C	LP
C	S	PA	PA	C	FLAT
C	C	S	A	C	METAL SHELL
PA	C	S	A	C	5500
Only glass reinforced epoxy for RM family					RM
C	S	A	C	C	HERMAPHRODITIC
C	C	S	A	C	PN
C	C	S	C	C	300A
S - standard A - available upon request PA - partially available within family, see spec for more data C - custom order					Legend
Use these suffix abbreviations for the following materials: AL - Aluminum PK - PEEK TT - Titanium SS - Stainless steel (316) Example: SCBH4 from titanium would be SCBH4-TT					Special material ordering format

Products

Standard Circular (SC)

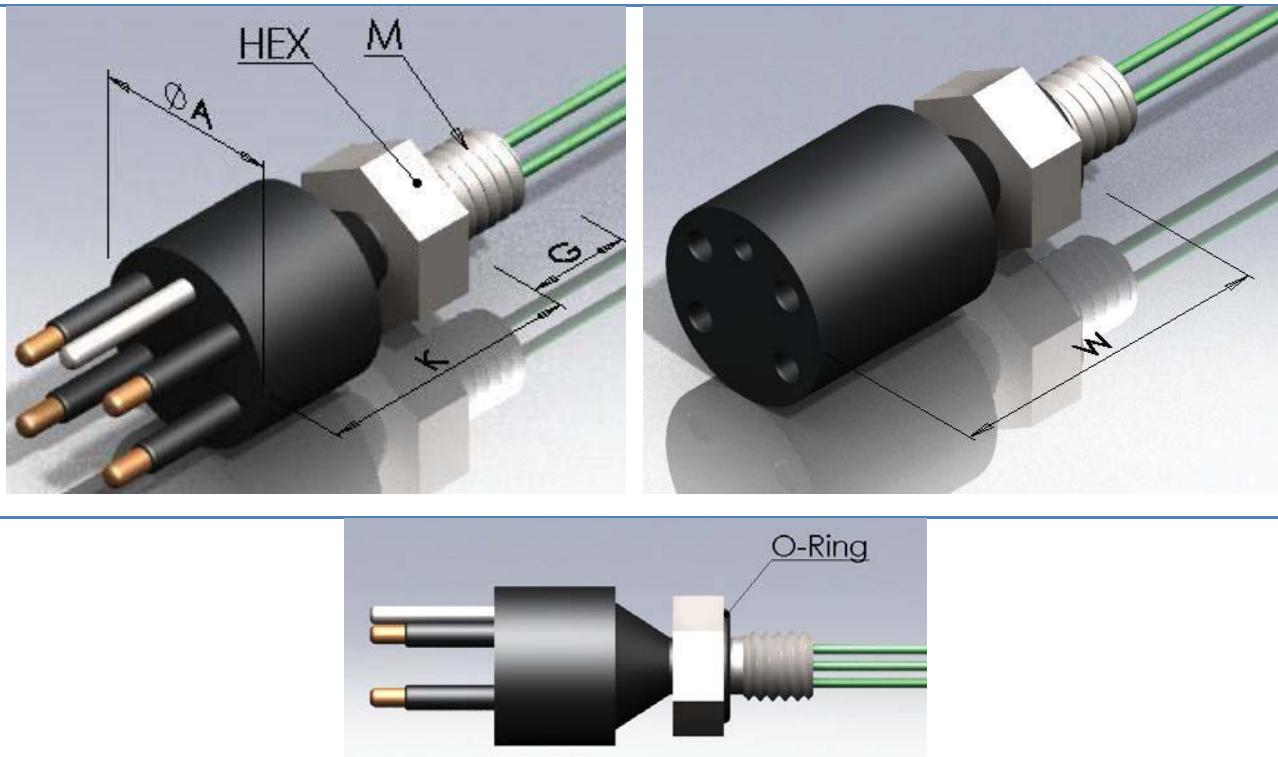
Standard Circular Inline Connector (SCIL)



SCIL Data Table

Number of contacts	2	3	4	5	6	8	10	12	16
Dim. A [mm]	25	25	25	25	32	32	32	40.5	40.5
Dim. B [mm]	19	19	19	19	19	19	19	25.5	25.5
Dim. C [mm]	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
Dim. L [mm]	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
Locking Sleeve Type:	FLS-A, MLS-A	FLS-A, MLS-A	FLS-A, MLS-A	FLS-A, MLS-A	FLS-B, MLS-B	FLS-B, MLS-B	FLS-B, MLS-B	FLS-C, MLS-C	FLS-C, MLS-C
Cable OD [mm]	7.5	8.1	9	12.2	12.3	13.5	15	16	18
Cable current [A]	12	12	12	12	10	10	10	10	10
Ordering number for Male	SCIL2M	SCIL3M	SCIL4M	SCIL5M	SCIL6M	SCIL8M	SCIL10M	SCIL12M	SCIL16M
Ordering number for Female	SCIL2F	SCIL3F	SCIL4F	SCIL5F	SCIL6F	SCIL8F	SCIL10F	SCIL12F	SCIL16F
Note:									

Standard Circular Bulk Head Connector (SCBH)

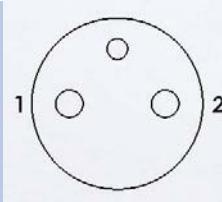
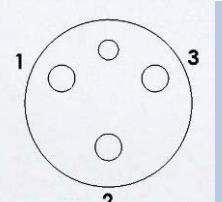
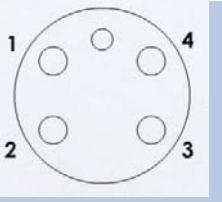
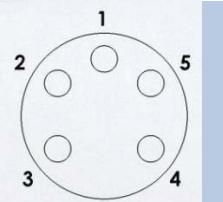
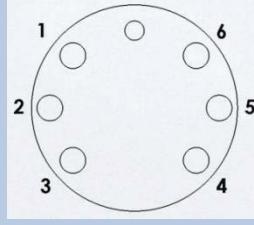
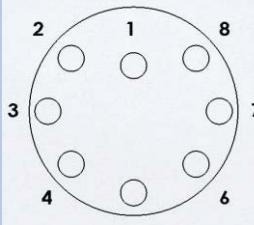
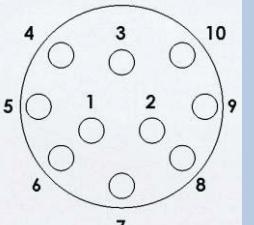
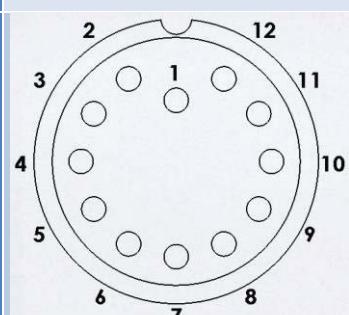
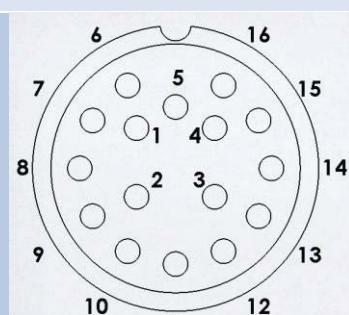


SCBH Data Table

Number of contacts	2	3	4	5	6	8	10	12	16
M[inch thread]	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF
Dim. A [mm]	25	25	25	25	32	32	32	40.5	40.5
Dim. K [mm]	36	36	36	36	41	41	41	38.5	38.5
Dim. G [mm]	14	14	14	14	14 or 19				
HEX [mm]	19	19	19	19	24	24	24	24	24
Dim. W [mm]	45	45	45	45	50	50	50	45	45
O-Ring [material: Nitrile]	2-014	2-014	2-014	2-014	2-017	2-017	2-017	2-017	2-017
Locking Sleeve Type:	FLS-A, MLS-A	FLS-A, MLS-A	FLS-A, MLS-A	FLS-A, MLS-A	FLS-B, MLS-B	FLS-B, MLS-B	FLS-C, MLS-C	FLS-C, MLS-C	FLS-C, MLS-C
Ordering number for Male	SCBH2M	SCBH3M	SCBH4M	SCBH5M	SCBH6M	SCBH8M	SCBH10M	SCBH12M	SCBH16M
Ordering number for Female	SCBH2F	SCBH3F	SCBH4F	SCBH5F	SCBH6F	SCBH8F	SCBH10F	SCBH12F	SCBH16F
Note:									

SC data

Contact Layout - SC

Number of contacts	2	3	4	5
Contact layout (Female) "A" size				
Number of contacts	6	8	10	
Contact layout (Female) "B" size				
Number of contacts	12	16		
Contact layout (Female) "C" size				

Specification - SC

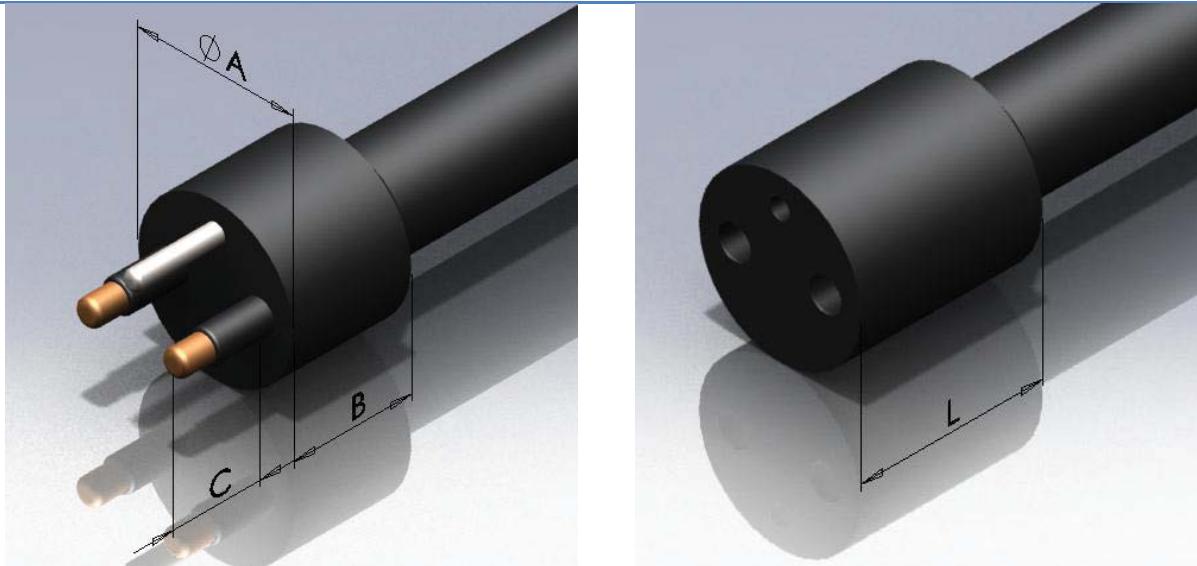
Operational		Material	
Max Current	10A	Molding	Low Carbon Neoprene
Max Voltage	600V	Bulkhead	Brass, 316 Stainless, Titanium
Insulation	>250megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Phosphor Bronze
Matings	>750	Sockets	Beryllium Copper
Temperature	-5C - +65C	Location Pin	316 Stainless
Depth	>600 bar	In-line cable	60cm, AWG 18 (0.82mm ²) 16/30 stranding
		BH leads	30cm, AWG 18 Teflon, (0.97mm ²) 19/30 stranding

Wire Color Code - SCIL

Designated wire	Number of contacts on connector									
	2	3	4	5	6	8	10	12	16	
Wire 1	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black
Wire 2	White	White	White	White	White	White	White	White	White	White
Wire 3		Red	Red	Red	Red	Red	Red	Red	Red	Red
Wire 4			Green	Green	Green	Green	Green	Green	Green	Green
Wire 5				Orange	Orange	Orange	Orange	Orange	Orange	Orange
Wire 6					Blue	Blue	Blue	Blue	Blue	Blue
Wire 7						White/Black	White/Black	White/Black	White/Black	White/Black
Wire 8						Red/Black	Red/Black	Red/Black	Red/Black	Red/Black
Wire 9							Green/Black	Green/Black	Green/Black	Green/Black
Wire 10							Orange/Black	Orange/Black	Orange/Black	Orange/Black
Wire 11								Blue/Black	Blue/Black	Blue/Black
Wire 12								Black/White	Black/White	Black/White
Wire 13										Red /White
Wire 14										Green /White
Wire 15										Blue /White
Wire 16										Black/ Red

Heavy Duty (HD)

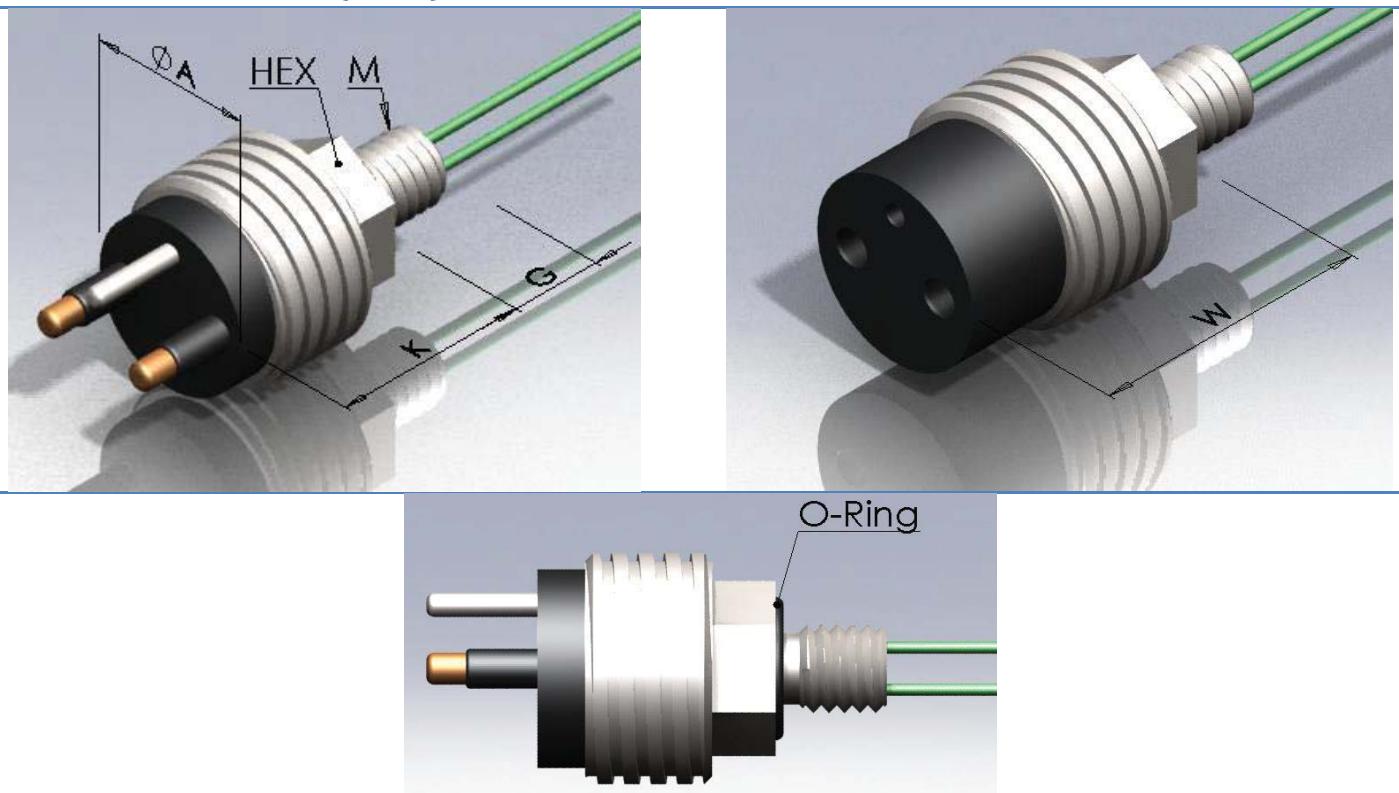
Inline Connector (HDIL)



HDIL Data Table

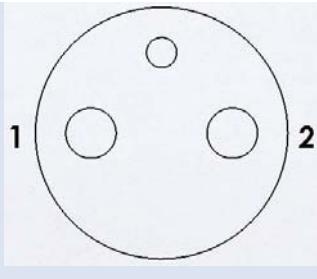
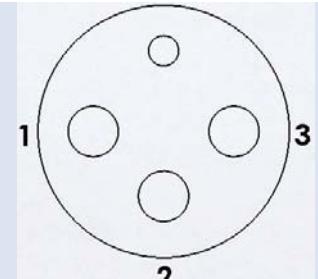
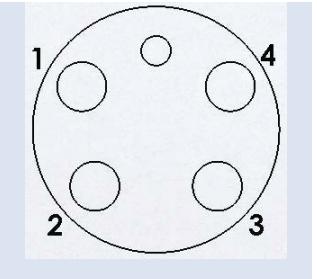
Number of contacts	2	3	4
Dim. A [mm]	25	25	25
Dim. B [mm]	19	19	19
Dim. C [mm]	14	14	14
Dim. L [mm]	28	28	28
Locking Sleeve Type:	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA
Cable OD [mm]	15.2	16.1	17
Cable current [A]	30	30	30
Ordering number for Male	HDIL2M	HDIL3M	HDIL4M
Ordering number for Female	HDIL2F	HDIL3F	HDIL4F

Bulk Head connector (HDBH)



HDBH Data Table			
Number of contacts	2	3	4
M[inch thread]	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF
Dim. A [mm]	25	25	25
Dim. K [mm]	30	30	30
Dim. G [mm]	14 or 19	14 or 19	14 or 19
HEX [mm]	24	24	24
Dim. W [mm]	39	39	39
O-Ring [material: Nitrile]	2-017	2-017	2-017
Locking Sleeve Type:	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA
Ordering number for Male	HDBH2M	HDBH3M	HDBH4M
Ordering number for Female	HDBH2F	HDBH3F	HDBH4F

HD data

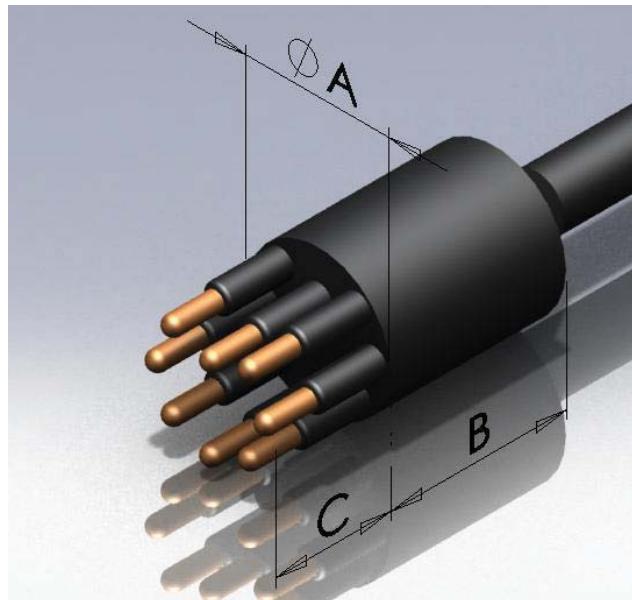
Contact Layout - HD			
Number of contacts	2	3	4
Contact layout (Female)			

Specification - HD			
Operational		Material	
Max Current	30A	Molding	Low Carbon Neoprene
Max Voltage	600V	Bulkhead	Brass, 316 Stainless, Titanium
Insulation	>250megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Phosphor Bronze
Matings	>750	Sockets	Beryllium Copper
Temperature	-5C - +65C	Location Pin	316 Stainless
Depth	>600 bar	In-line cable	60cm, AWG 12 (3.29mm ²) Neoprene 65/30 stranding
		BH leads	30cm, AWG 12 Teflon, 19/25 stranding

Wire Color Code - HDIL			
Designated wire	Number of contacts on connector		
	2	3	4
Wire 1	Black	Black	Black
Wire 2	White	White	White
Wire 3		Green	Red
Wire 4			Green

Mini Connector (MC)

Inline Connector (MCIL)



MCIL Data Table

Number of contacts	2	3	4	5	6	8	9	10	12	16	18
Dim. A [mm]	15.5	15.5	15.5	15.5	15.5	15.5	25.5	25.5	25.5	25.5	25.5
Dim. B [mm]	19	19	19	19	19	19	19	19	19	19	19
Dim. C [mm]	12.5	12.5	12.5	12.5	12.5	12.5	14	14	14	14	14
Dim. L [mm]	25	25	25	25	25	25	28.5	28.5	28.5	28.5	28.5
Locking Sleeve Type:	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA
Cable OD [mm]	8	9.4	10	8	8	10	10	10.5	9	10.5	10.5
Cable current [A]	8	8	8	8	7	7	6	6	5	5	4
Ordering number for Male	MCIL2M	MCIL3M	MCIL4M	MCIL5M	MCIL6M	MCIL8M	MCIL9M	MCIL10M	MCIL12M	MCIL16M	MCIL18M
Ordering number for Female	MCIL2F	MCIL3F	MCIL4F	MCIL5F	MCIL6F	MCIL8F	MCIL9F	MCIL10F	MCIL12F	MCIL16F	MCIL18F
Note:							For sizes 9,10,12,16,18 see MCIL-SU for Subconn compatibility				

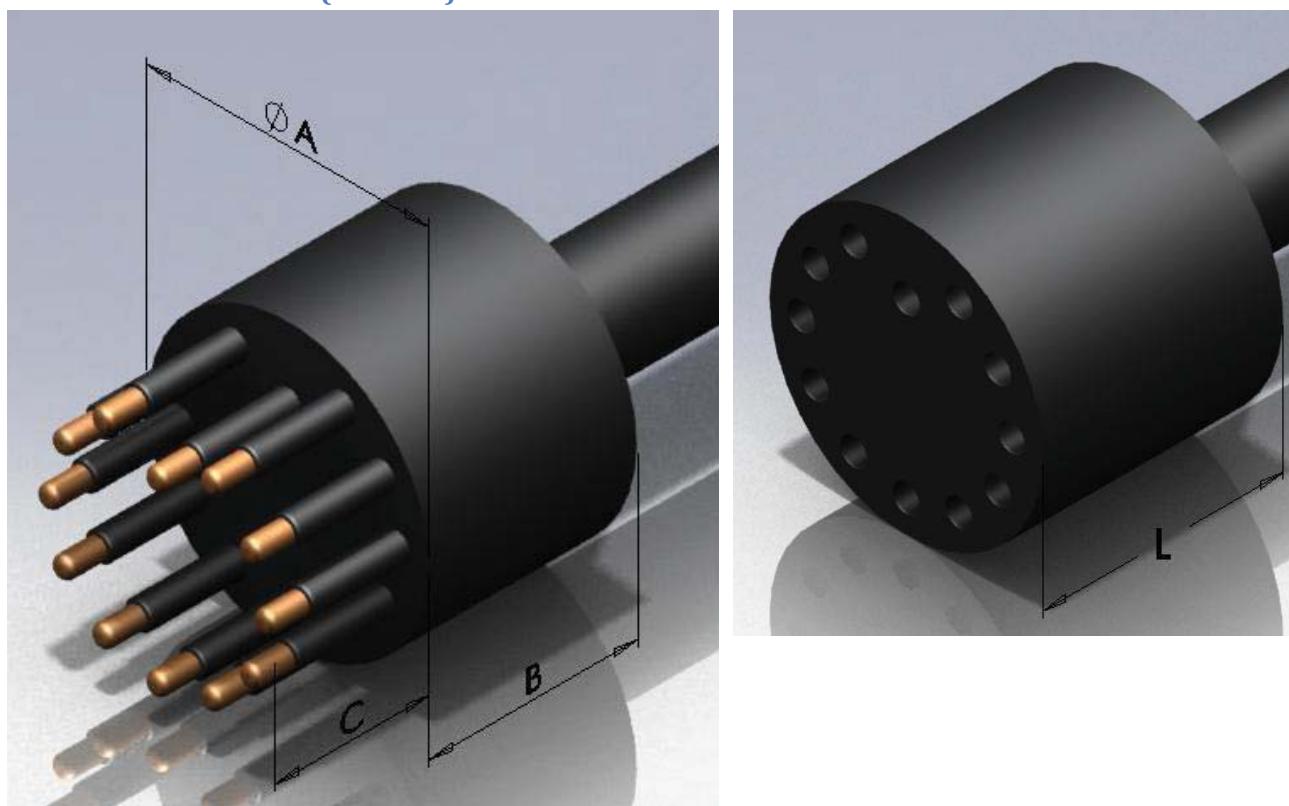
Bulk Head Connector (MCBH)



MCBH Data Table

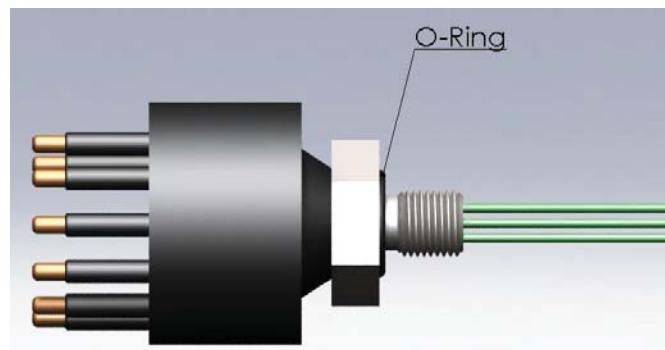
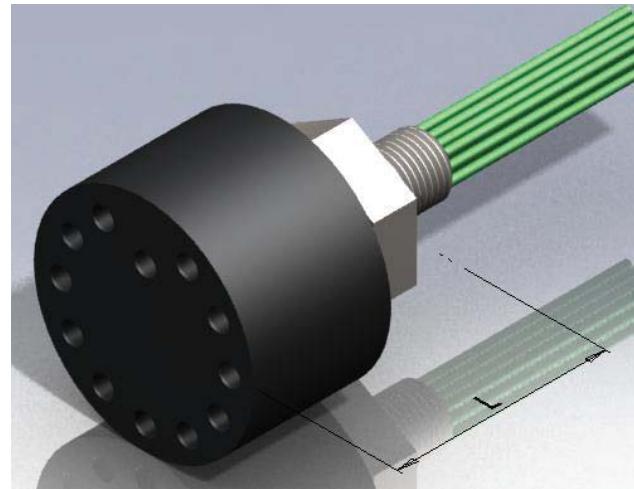
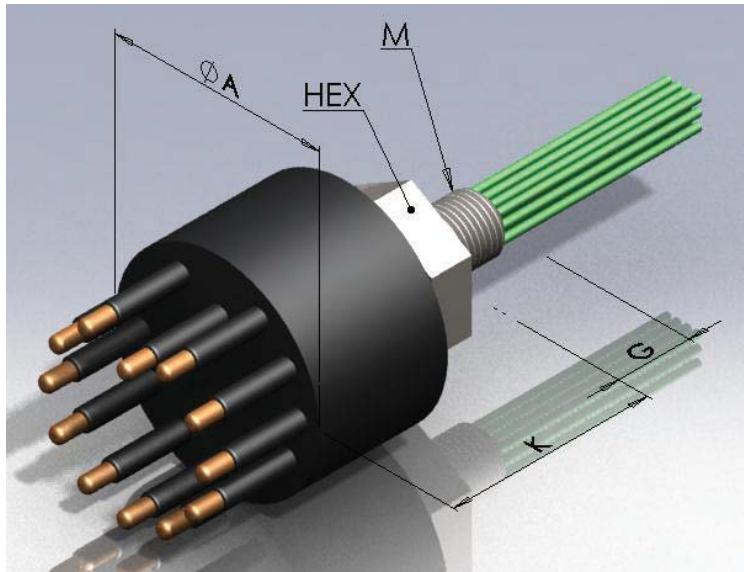
Number of contacts	2	3	4	5	6	8	9	10	12	16	18
Dim. A [mm]	15.5	15.5	15.5	15.5	15.5	15.5	25.5	25.5	25.5	25.5	25.5
M[inch thread]	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF	5/8-18 UNF
Dim. K [mm]	21.5	21.5	21.5	21.5	21.5	21.5	30	30	30	30	30
Dim. G [mm]	19	19	19	19	19	19	14 or 19	14 or 19	14 or 19	14 or 19	14 or 19
HEX [mm]	19	19	19	19	19	19	24	24	24	24	24
Dim. W [mm]	28	28	28	28	28	28	39	39	39	39	39
O-Ring [material: Nitrile]	2-014	2-014	2-014	2-014	2-014	2-014	2-017	2-017	2-017	2-017	2-017
Locking Sleeve Type:	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MC, MLS-MC	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA
Ordering number for Male	MCBH2M	MCBH3M	MCBH4M	MCBH5M	MCBH6M	MCBH8M	MCBH9M	MCBH10M	MCBH12M	MCBH16M	MCBH18M
Ordering number for Female	MCBH2F	MCBH3F	MCBH4F	MCBH5F	MCBH6F	MCBH8F	MCBH9F	MCBH10F	MCBH12F	MCBH16F	MCBH18F
Note:							For sizes 9,10,12,16,18 see MCIL-SU for compatibility Thread 1/2-20, Oring 2-015				

SU Inline Connector (MCIL-SU)



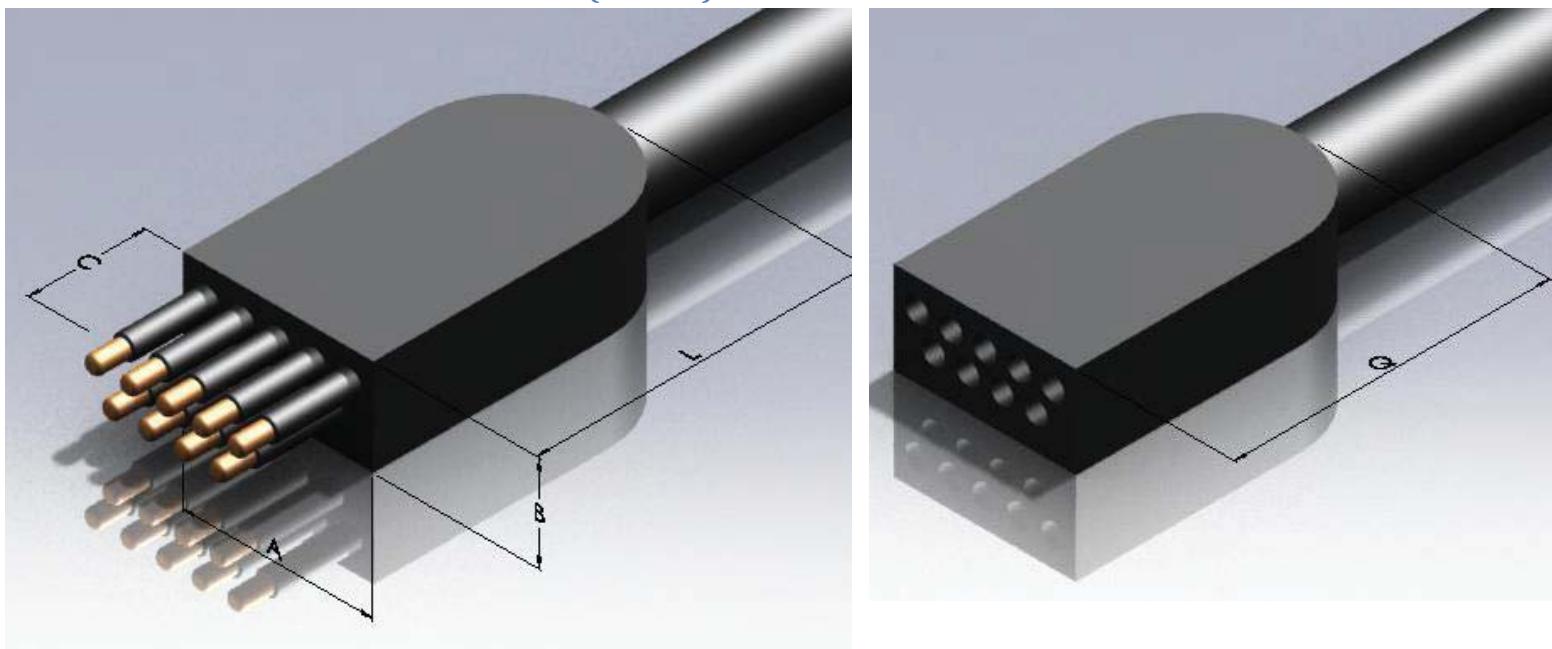
MCIL-SU Data Table				
Number of contacts	9	10	12	16
Dim. A [mm]	25	25	25	25
Dim. B [mm]	19	19	19	19
Dim. C [mm]	19.5	19.5	19.5	19.5
Dim. L [mm]	28	28	28	28
Locking Sleeve Type:	FLS-A MLS-A	FLS-A MLS-A	FLS-A MLS-A	FLS-A MLS-A
Cable OD [mm]	10	10.5	11	12
Cable current [A]	Contact manufacturer			
Ordering number for Male	MCIL9M-SU	MCIL10M-SU	MCIL12M-SU	MCIL16M-SU
Ordering number for Female	MCIL9F-SU	MCIL10F-SU	MCIL12F-SU	MCIL16F-SU

SU Bulk Head Connector (MCBH-SU)



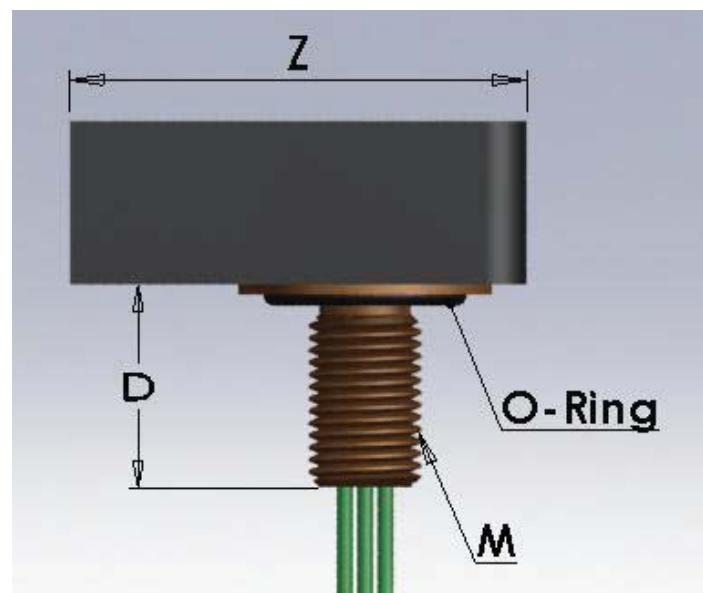
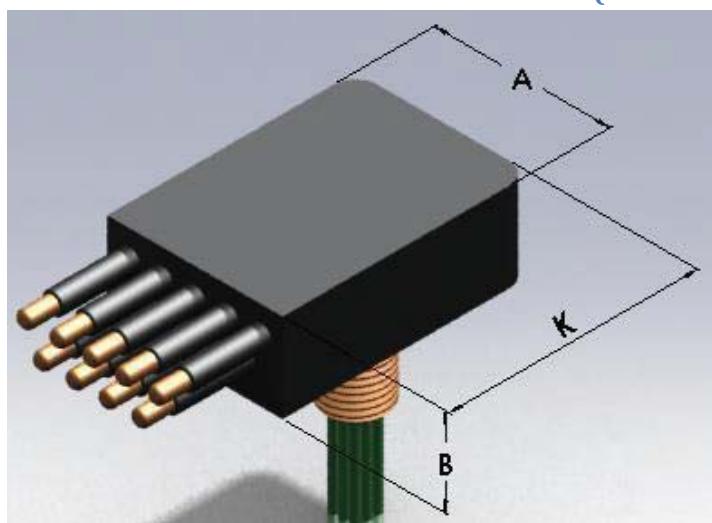
MCBH-SU Data Table				
Number of contacts	9	10	12	16
M[inch thread]	1/2-20 UNF	1/2-20 UNF	1/2-20 UNF	1/2-20 UNF
Dim. A [mm]	25	25	25	25
Dim. K [mm]	36	36	36	36
Dim. G [mm]	14 or 19	14 or 19	14 or 19	14 or 19
HEX [mm]	24	24	24	24
Dim. L [mm]	45	45	45	45
O-Ring [material: Nitrile]	2-017	2-017	2-017	2-017
Locking Sleeve Type:	FLS-A MLS-A	FLS-A MLS-A	FLS-A MLS-A	FLS-A MLS-A
Ordering number for Male	MCBH9M-SU	MCBH10M-SU	MCBH12M-SU	MCBH16M-SU
Ordering number for Female	MCBH9F-SU	MCBH10F-SU	MCBH12F-SU	MCBH16F-SU

MC Low Profile Inline connector (MCLPIL)



MCLPIL Data Table		
Number of contacts	7	9
Dim. A [mm]	25	25
Dim. B [mm]	14	14
Dim. C [mm]	12.5	12.5
Dim. L [mm]	36.5	36.5
Dim. Q [mm]	43	43
Cable OD [mm]	8.5	10
Cable current [A]	7	7
Ordering number for Male	MCLPIL7M	MCLPIL9M
Ordering number for Female	MCLPIL7F	MCLPIL9F

MC Low Profile Bulkhead connector (MCLPBH)



MCLPBH Data Table		
Number of contacts	7	9
Dim. A [mm]	25	25
Dim. B [mm]	14	14
Dim. D [mm]	26	26
Dim. K [mm]	28	28
Dim. Z [mm]	34.5	34.5
M[inch thread]	7/16-20 UNF	7/16-20 UNF
O-Ring [material: Nitrile]	2-014	2-014
Ordering number for Male	MCLPBH7M	MCLPBH9M
Ordering number for Female	MCLPBH7F	MCLPBH9F

MC contact layout

Contact Layout - MC

Number of contacts	2	3	4	5	6	8
Contact layout (Female)						
Number of contacts	9	12	16		18	
Contact layout (Female)						

Contact Layout – MC -SU

MC-IMP

Number of contacts	9	10	12	16	18
Contact layout (Female)					

Contact Layout – MCLP-SU

Number of contacts	7	7	9	7
Contact layout (Female)		MCLPIL7M MCLPIL7F MCLPBH7M MCLPBH7F		MCLPIL9M MCLPIL9F MCLPBH9M MCLPBH9F

MC spec

Specification MC			
Operational		Material	
Max Current	2-4 contacts: 10A 5-16 contacts: 8A	Molding	Low Carbon Neoprene
Max Voltage	300V	Bulkhead	Brass, 316 Stainless, Titanium
Insulation	>200megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Phosphor Bronze
Matings	>750	Sockets	Beryllium Copper
Temperature	-5C - +65C	Location Pin	316 Stainless
Depth	>600 bar	In-line cable	2-4 contacts: 60cm, AWG 18 (0.82 mm ²) 16/30 stranding 5-16 contacts: 60cm AWG20 (0.5 mm ²) 26/34 stranding, 12-16 contacts PU Jacket
		BH leads	2-4 contacts: 30cm, AWG 18 Teflon, (0.97 mm ²) 19/30 stranding 5-16 contacts: 30cm, AWG20 Teflon (0.6 mm ²) 19/32 stranding

MC Wire color

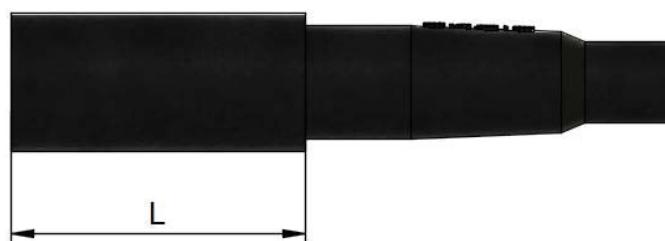
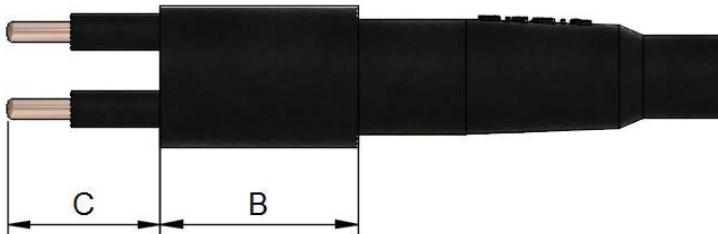
Designated wire	Wire color code - MCIL									
	Number of contacts on connector									
	2	3	4	5	6	8	9	12	16	
Wire 1	Black	Black	Black	Black	Black	Black	Black	Violet	Yellow/Brn	
Wire 2	White	White	White	White	Green	Green	Green	Grey/Pink	White/Yell	
Wire 3		Green	Red	Red	Brown	Brown	Brown	Red/Blue	Brn/Green	
Wire 4			Green	Brown	Blue	Blue	Blue	Black	White/Grn	
Wire 5				Blue	Yellow	Yellow	Yellow	White	Grey/Brn	
Wire 6					Blue/Brown	Green/Black	Green/Black	Brown	White/Grey	
Wire 7						Yellow/Black	Yellow/Black	Green	Green	
Wire 8						Blue/Black	Blue/Black	Yellow	Brown	
Wire 9							Brown/Black	Grey	White	
Wire 10								Pink	Red/Blue	
Wire 11								Blue	Grey/Pink	
Wire 12								Red	Violet	
Wire 13									Black	
Wire 14									Red	
Wire 15									Blue	
Wire 16									Pink	

MCLP Wire color

Wire color code - MCLP		
Designated wire	Number of contacts on connector	
	7	9
Wire 1	Black	Black
Wire 2	White	White
Wire 3	Red	Red
Wire 4	Green	Green
Wire 5	Blue	Orange
Wire 6	Brown	Blue
Wire 7	Yellow	White/Black
Wire 8		Red/Black
Wire 9		Green/Black

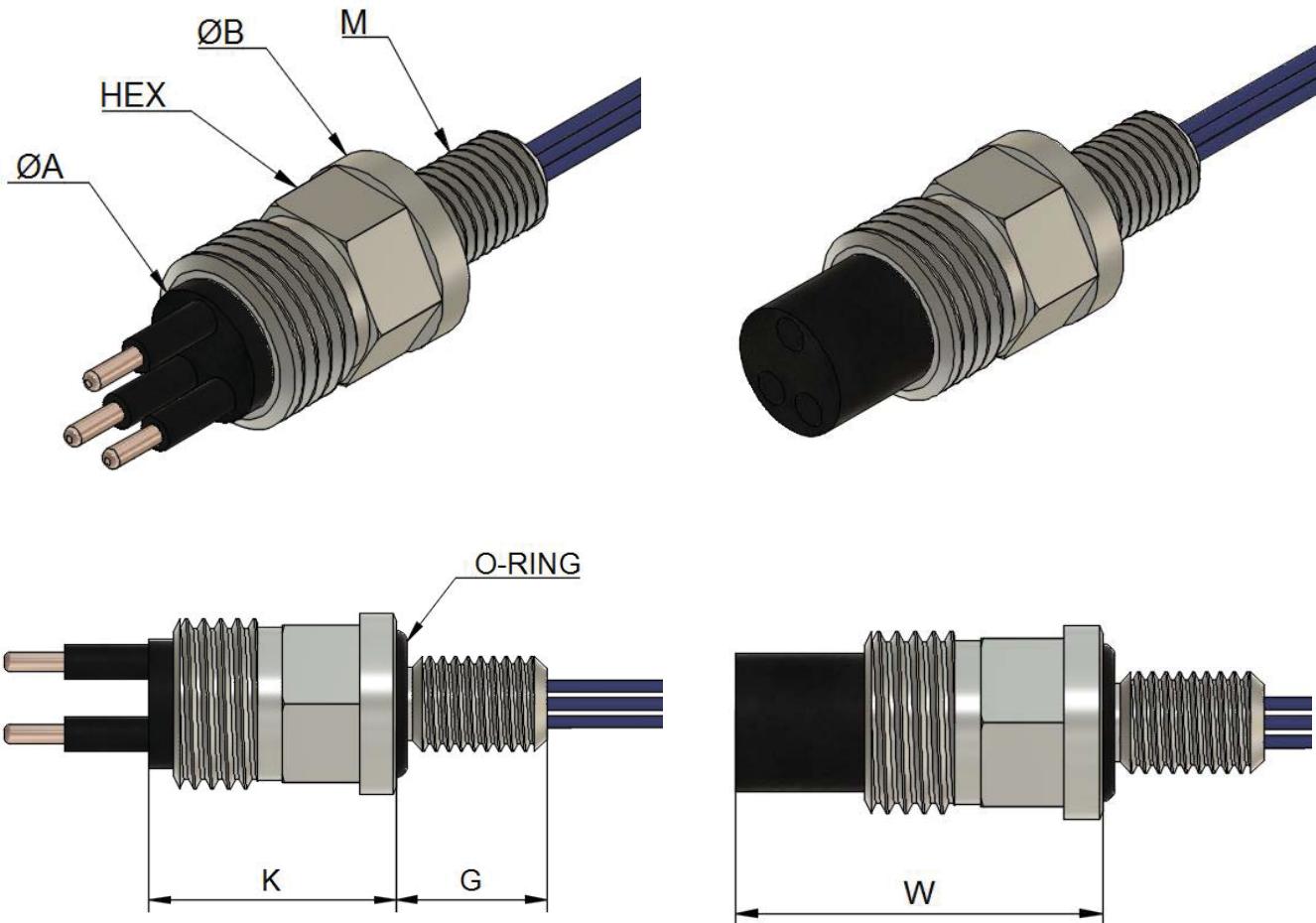
Tiny Connector (TC)

Inline Connector (TCIL)



TCIL Data table					
Number of contacts	2	3	4	5	7
Dim. A [mm]	11	11	11	11	11
Dim. B [mm]	15.5	15.5	15.5	15.5	15.5
Dim. C [mm]	12	12	12	12	12
Dim. L [mm]	23.5	23.5	23.5	23.5	23.5
Locking Sleeve Type:	FLS-TC, MLS-TC				
Cable OD [mm]	5.6	6.5	5.5	5.8	6.0
Cable current [A]	7	7	7	7	4.4
Ordering number for Male	TCIL2M	TCIL3M	TCIL4M	TCIL5M	TCIL7M
Ordering number for Female	TCIL2F	TCIL3F	TCIL4F	TCIL5F	TCIL7F

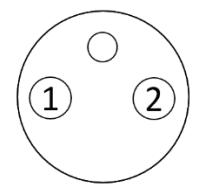
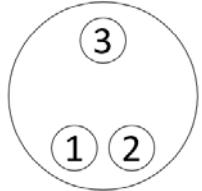
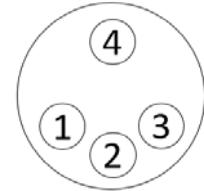
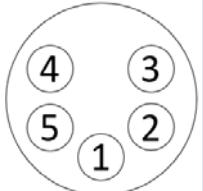
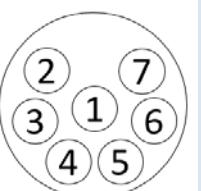
Bulk Head Connector (TCBH)



TCBH Data table

Number of contacts	2	3	4	5	7
Dim. A [mm]	11	11	11	11	11
Dim. B [mm]	15	15	15	15	15
M[inch thread]	5/16-24 2A UNF				
Dim. K [mm]	20.5	20.5	20.5	20.5	20.5
Dim. G [mm]	12.5	12.5	12.5	12.5	12.5
HEX [mm]	13	13	13	13	13
Dim. W [mm]	28.5	28.5	28.5	28.5	28.5
O-Ring [material: Nitrile]	2-012	2-012	2-012	2-012	2-012
Locking Sleeve Type:	FLS-TC, MLS-TC				
Ordering number for Male	TCBH2MSS	TCBH3MSS	TCBH4MSS	TCBH5MSS	TCBH7MSS
Ordering number for Female	TCBH2FSS	TCBH3FSS	TCBH4FSS	TCBH5FSS	TCBH7FSS

TC data

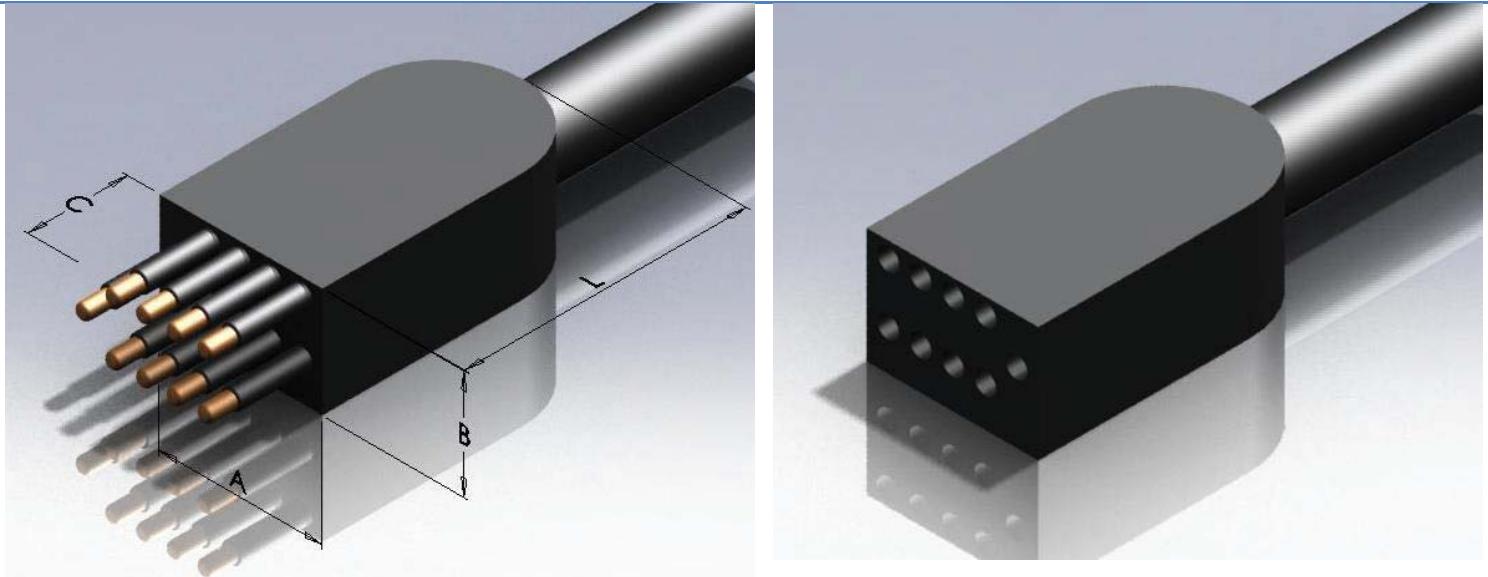
Contact Layout - TC					
Number of contacts	2	3	4	5	7
Contact layout (Female)					

Specification TC					
Operational		Material			
Max Current		2-5 contacts: 7A 7 contacts: 4.4A		Molding	
Max Voltage		300V		Bulkhead	
Insulation		>200megaohm		Contacts	
Contacts		<0.01 ohm		Phosphor Bronze	
Matings		>500		Beryllium Copper	
Temperature		-5C - +65C		316 Stainless	
Depth		>600 bar		In-line cable	
				2-5 contacts: 60cm AWG20 (0.5 mm ²) 26/34 stranding 7 contacts: 60cm, AWG22 (0.3 mm ²) 7/30 stranding	
				BH leads	
				2-5 contacts: 30cm, AWG20 Teflon (0.5 mm ²) 19/32 strands 7 contacts: 30cm, AWG22 Teflon (0.3 mm ²) 7/30 strands	

Wire color code - TCIL					
Designated wire	Number of contacts on connector				
	2	3	4	5	7
Wire 1	Black	Black	Black	Black	Black
Wire 2	White	White	White	White	White
Wire 3		Green	Red	Red	Red
Wire 4			Green	Green	Green
Wire 5				Orange	Orange
Wire 6					Blue
Wire 7					Brown

Low Profile (LP)

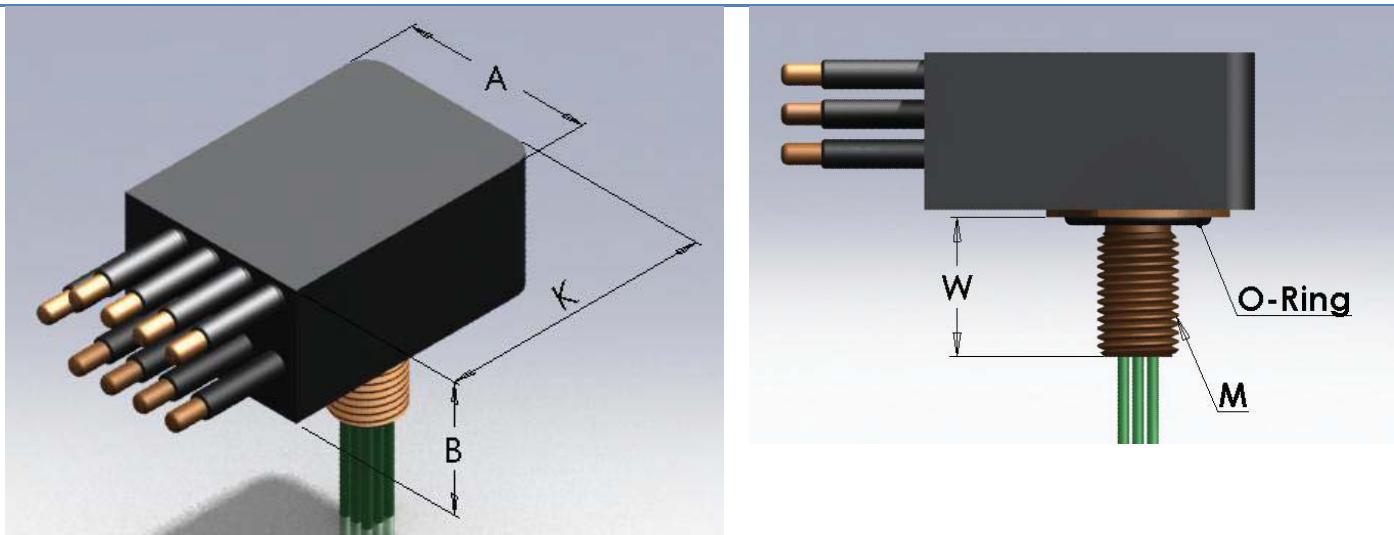
Inline Connector (LPIL)



LPIL Data Table

Number of contacts	2	3	4	6	7	9
Dim. A [mm]	25	25	25	25	25	31.8
Dim. B [mm]	16	16	16	18.6	18.6	21.4
Dim. C [mm]	19.5	19.5	19.5	19.5	19.5	19.5
Dim. L [mm]	42.5	42.5	42.5	50	50	55
Cable OD [mm]	6	6.7	7	7.5	8	9.5
Cable current [A]	12	12	12	10	10	10
Ordering number for Male	LPIL2M	LPIL3M	LPIL4M	LPIL6M	LPIL7M	LPIL9M
Ordering number for Female	LPIL2F	LPIL3F	LPIL4F	LPIL6F	LPIL7F	LPIL9F

Bulk Head Connector (LPBH)

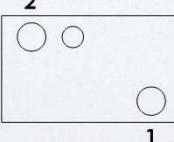
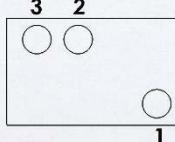
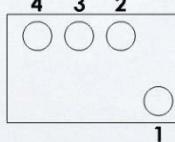
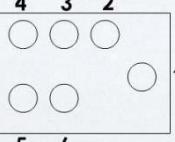
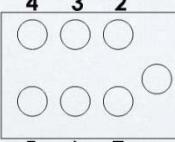
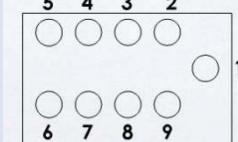
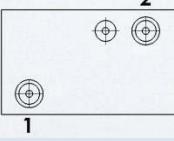
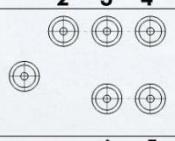
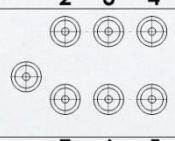
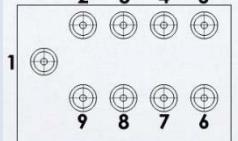


LPBH Data Table

Number of contacts	2	3	4	6	7	9
Dim. A [mm]	25	25	25	25	25	31.8
Dim. B [mm]	16	16	16	18.6	18.6	21.4
M[inch thread]	7/16-20 UNF	7/16-20 UNF				
Dim. K [mm]	32	32	32	44	44	45
Dim. W [mm]	12.5; 19; 25	12.5; 19; 25	12.5; 19; 25	12.5; 19; 25	12.5; 19; 25	19; 25
O-Ring [material: Nitrile]	2-014	2-014	2-014	2-014	2-014	2-014
Ordering number for Male	LPBH2M	LPBH3M	LPBH4M	LPBH6M	LPBH7M	LPBH9M
Ordering number for Female	LPBH2F	LPBH3F	LPBH4F	LPBH6F	LPBH7F	LPBH9F

LP data

Contact Layout - LP

Number of contacts	2	3	4	6	7	9
Contact layout (Female)						
Contact layout (Male)						

Specification - LP

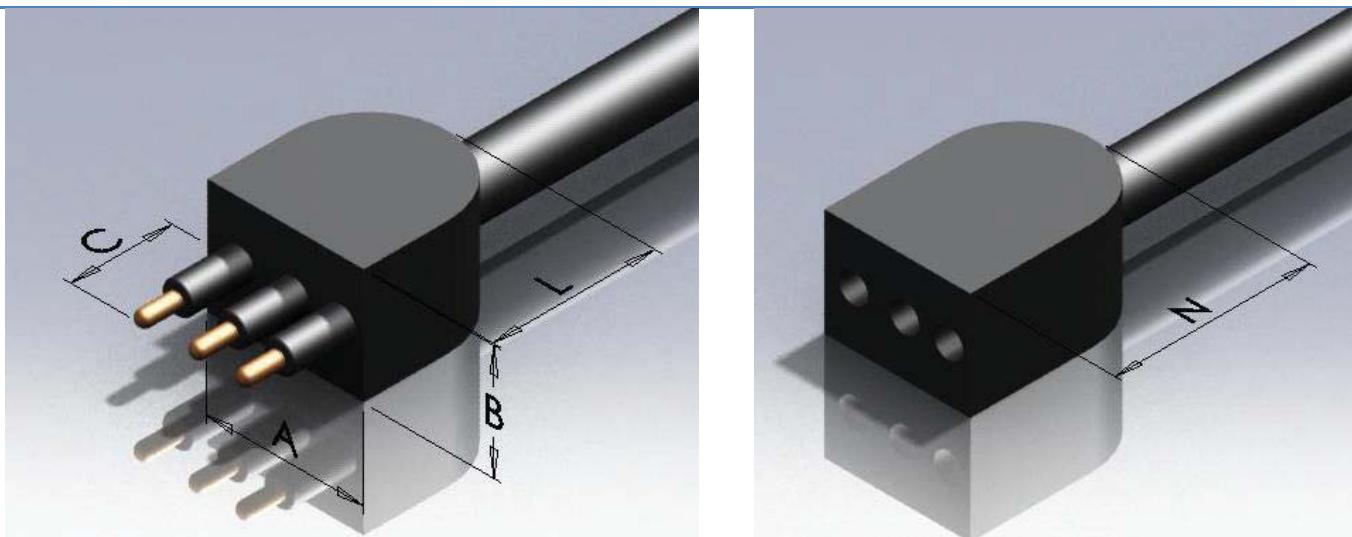
Operational		Material	
Max Current	2-4 contacts: 12A 6-9 contacts: 10A	Molding	Low Carbon Neoprene
Max Voltage	600V	Bulkhead	2-4 contacts: Brass, 316 Stainless, Titanium 6-9 contacts: Brass
Insulation	>250 megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Phosphor Bronze
Matings	>750	Sockets	Beryllium Copper
Temperature	-5C - +65C	Location Pin	316 Stainless
Depth	>600 bar	In-line cable	60cm, AWG 18 (0.82 mm ²) 16/30 stranding
		BH leads	30cm, AWG 18 Teflon, (0.97 mm ²) 19/30 stranding

Wire Color Code - LPIL

Designated wire	Number of contacts on connector					
	2	3	4	6	7	9
Wire 1	Black	Black	Black	Black	Black	Black
Wire 2	White	White	White	White	White	White
Wire 3		Green	Red	Red	Red	Red
Wire 4			Green	Green	Green	Green
Wire 5				Orange	Orange	Orange
Wire 6				Blue	Blue	Blue
Wire 7					White/Black	White/Black
Wire 8						Red/Black
Wire 9						Green/Black

Flat (FAWL, FAWM; FL, FM)

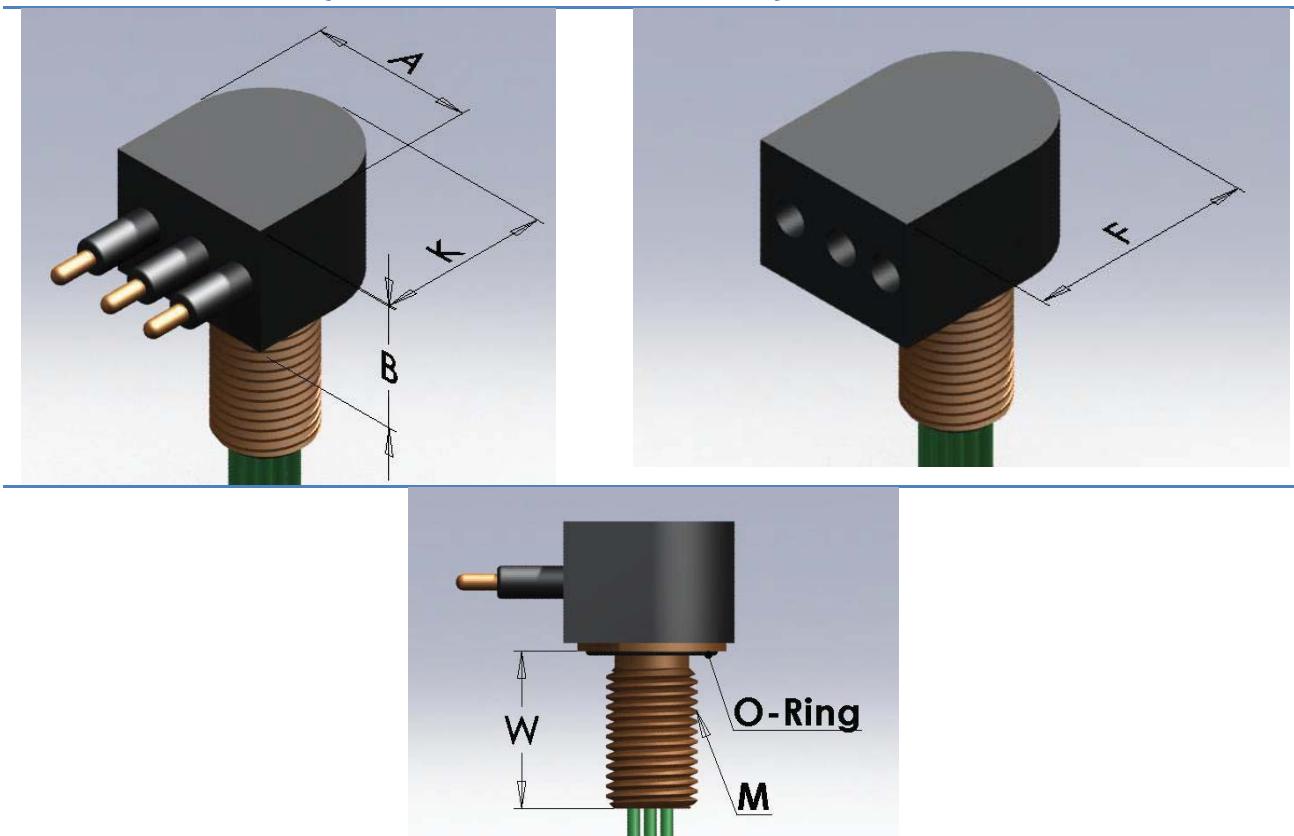
Inline Connector (FAWLIL, FAWMIL; FLIL, FMIL)



FAWLIL, FAWMIL, FLIL, FMIL Data Table

Number of contacts	2	3	4	5	8	10
Dim. A [mm]	20	20	20	20	21	21
Dim. B [mm]	14.7	14.7	14.7	14.7	16	16
Dim. C [mm]	13	13	13	13	13	13
Dim. L [mm]	20.7	20.7	20.7	20.7	25	25
Dim. N [mm]	26.7	26.7	26.7	26.7	35	35
Cable OD [mm]	6	6.7	7	7.5	9.5	10
Cable current [A] FAWM/FAWL	7	7	7	7	7	7
Cable current [A] FM/FL	8	8	8	8	8	8
Ordering number for Female FAWL/FAWM	FAWLIL2F	FAWLIL3F	FAWLIL4F	FAWLIL5F	FAWMIL8F	FAWMIL10F
Ordering number for Male FAWL/FAWM	FAWLIL2M	FAWLIL3M	FAWLIL4M	FAWLIL5M	FAWMIL8M	FAWMIL10M
Ordering number for Female FL/FM	FLIL2F	FLIL3F	FLIL4F	FLIL5F	FMIL8F	FMIL10F
Ordering number for Male FL/FM	FLIL2M	FLIL3M	FLIL4M	FLIL5M	FMIL8M	FMIL10M
NOTE:	FAWL and FAWM are same family; FAWL is the Prefix for 2-5 pins, while FAWM is the Prefix for 8-10 pins. FL and FM similarly represent a similar family with heavier pins.					

Bulk Head Connector (FAWLH, FAWMBH; FLBH, FMBH)



FAWLH, FAWMBH; FLBH, FMBH Data Table

Number of contacts	2	3	4	5	8	10
M[inch thread]	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF	7/16-20 UNF
Dim. A [mm]	20	20	20	20	21	21
Dim. B [mm]	14.7	14.7	14.7	14.7	16	16
Dim. K [mm]	20.7	20.7	20.7	20.7	25	25
Dim. F [mm]	26.7	26.7	26.7	26.7	35	35
Dim. W [mm]	19	19	19	19	12.5; 19; 25	12.5; 19; 25
O-Ring [material: Nitrile]	2-014	2-014	2-014	2-014	2-014	2-014
Ordering number for Female FAWL/FAWM	FAWBHL2F	FAWLH3F	FAWLH4F	FAWLH5F	FAWMBH8F	FAWMBH10F
Ordering number for Male FAWL/FAWM	FAWLH2M	FAWLH3M	FAWLH4M	FAWLH5M	FAWMBH8M	FAWMBH10M
Ordering number for Female FL/FM	FLBH2F	FLBH3F	FLBH4F	FLBH5F	FMBH8F	FMBH10F
Ordering number for Male FL/FM	FLBH2M	FLBH3M	FLBH4M	FLBH5M	FMBH8M	FMBH10M
NOTE:	FAWL and FAWM are same family; FAWL is the Prefix for 2-5 pins, while FAWM is the Prefix for 8-10 pins. FL and FM similarly represent a similar family with heavier pins.					

FAWL, FAWM; FL, FM data

Contact Layout - FAWL, FAWM; FL, FM

Number of contacts	2	3	4	5	8	10
Contact layout (Female)	(1) (2)	(1) (2) (3)	(3) (2) (4) (1)	(3) (2) (1) (5) (4)	(4) (3) (2) (1) (6) (5) (8) (7)	(4) (3) (2) (1) (6) (5) (10) (9) (8) (7)

Specification - FAWL, FAWM; FL, FM

Operational		Material		
Max Current	FAWL/FAWM: 7A FL/FM: 8A	Molding	Low Carbon Neoprene	
Max Voltage	300V	Bulkhead	2-5 contacts: Brass 8-10 contacts: Brass, 316 Stainless, Titanium	
Insulation	>200 megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00	
Contacts	<0.01 ohm	Pin	Phosphor Bronze	
Matings	>750	Sockets	Beryllium Copper	
Temperature	-5C - +65C	Location Pin	316 Stainless	
Depth	>600 bar	In-line cable	2-4 contacts: 60cm, AWG 18 (0.82 mm ²) 16/30 stranding 5-10 contacts: 60cm, AWG 20 (0.5 mm ²) 26/34 stranding	
		BH leads	30cm, AWG 20 Teflon, (0.6 mm ²) 19/32 stranding	

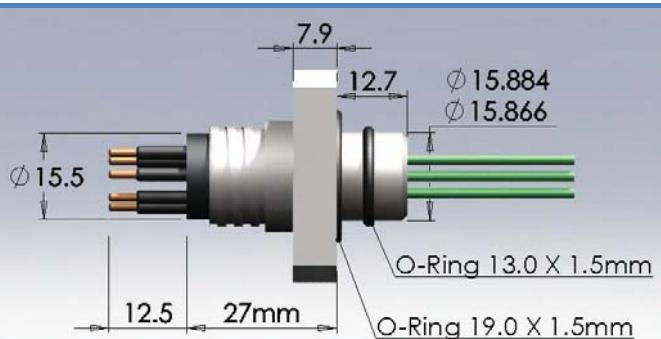
Wire Color Code - FAWLIL, FAWMIL; FLIL, FMIL

Designated wire	Number of contacts on connector					
	2	3	4	5	8	10
Wire 1	Black	Black	Black	Black	Black	Black
Wire 2	White	White	White	White	Green	White
Wire 3		Green	Red	Red	Brown	Red
Wire 4			Green	Brown	Blue	Green
Wire 5				Blue	Yellow	Orange
Wire 6					Blue/Black	Blue
Wire 7					Yellow/Black	Brown
Wire 8					Green/Black	Yellow
Wire 9						Gray
Wire 10						Violet

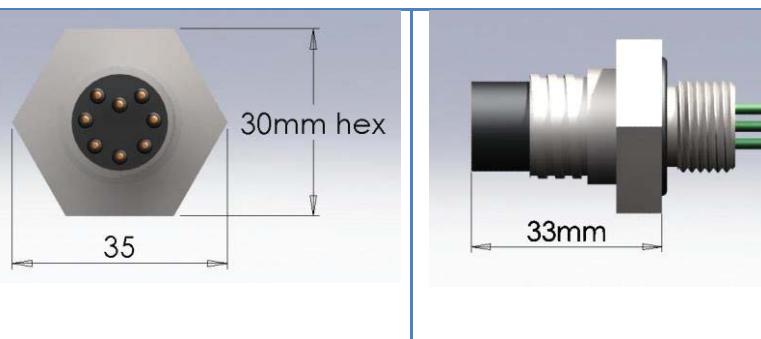
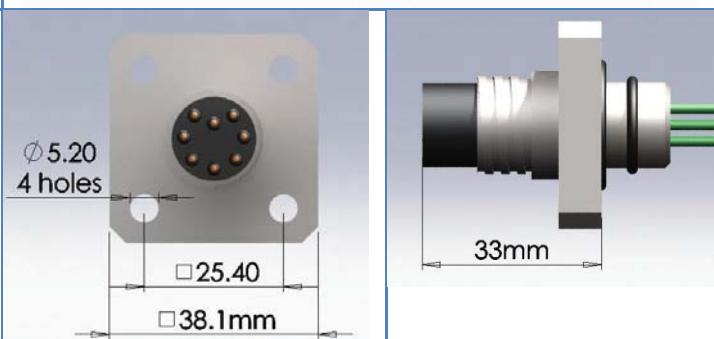
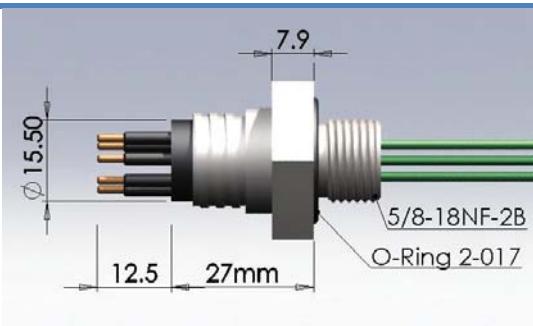
METAL SHELL (MS)

METAL SHELL 1500 SERIES

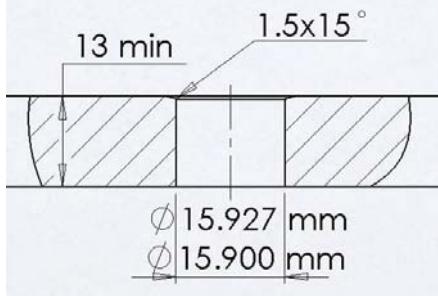
1500 FCR (flange)



1500 BCR (hex)



1500 FCR Socket

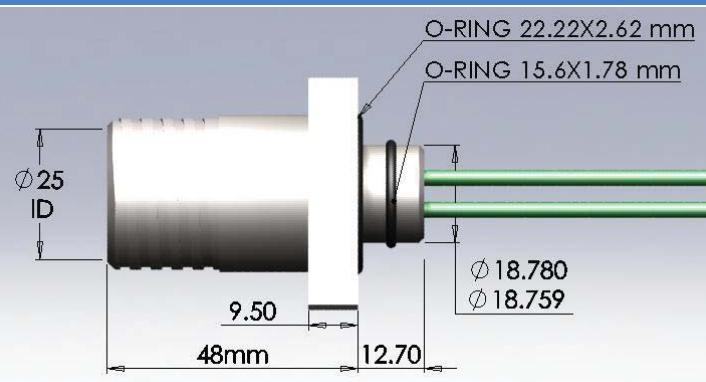


METAL SHELL 1500 SERIES Data Table

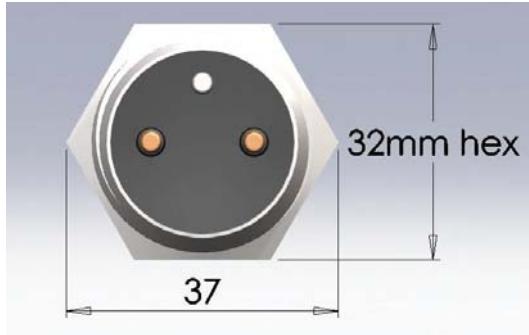
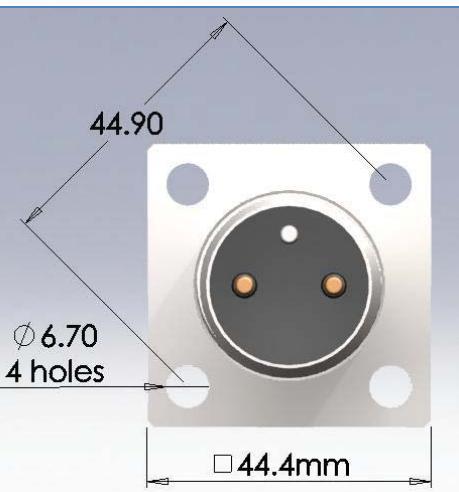
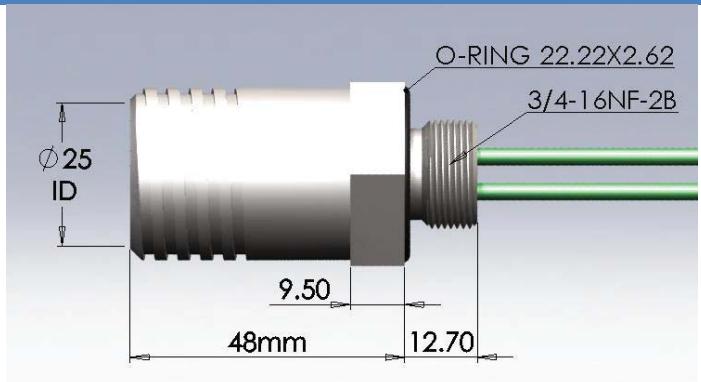
Number of contacts	2	3	4	5	6	8
Ordering number FCR Female	FCR1502F	FCR1503F	FCR1504F	FCR1505F	FCR1506F	FCR1508F
Ordering number FCR Male	FCR1502M	FCR1503M	FCR1504M	FCR1505M	FCR1506M	FCR1508M
Ordering number BCR Female	BCR1502F	BCR1503F	BCR1504F	BCR1505F	BCR1506F	BCR1508F
Ordering number BCR Male	BCR1502M	BCR1503M	BCR1504M	BCR1505M	BCR1506M	BCR1508M
Locking Sleeve Type:	FLS-MC	FLS-MC	FLS-MC	FLS-MC	FLS-MC	FLS-MC
Note:	Compatible with MC series 2-8					

METAL SHELL 2000 SERIES

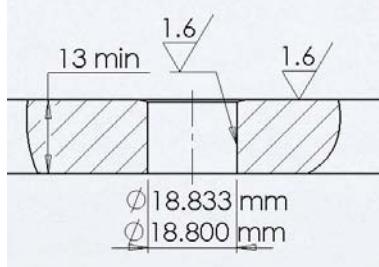
2000 FCR (flange)



2000 BCR (hex)



2000 FCR Socket

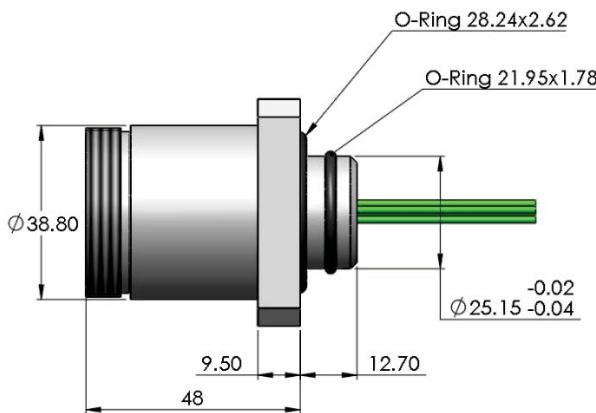


METAL SHELL 2000 SERIES Data Table

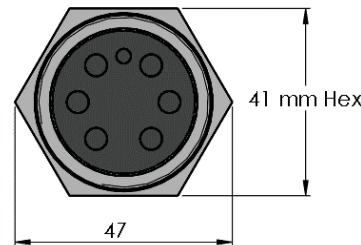
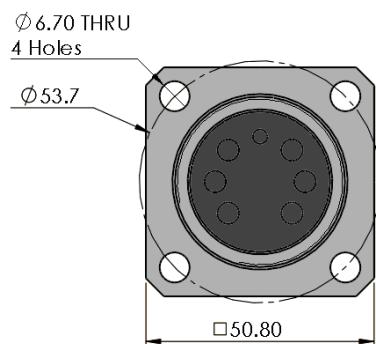
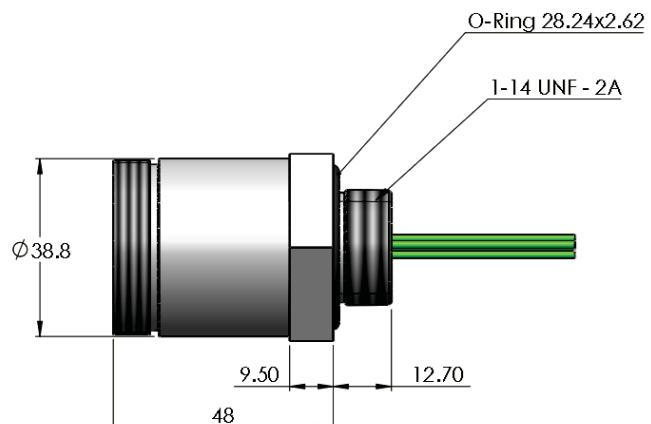
Number of contacts	2	3	4	10	12
Ordering number FCR Female	FCR2002F	FCR2003F	FCR2004F	FCR2010F	FCR2012F
Ordering number FCR Male	FCR2002M	FCR2003M	FCR2004M	FCR2010M	FCR2012M
Ordering number BCR Female	BCR2002F	BCR2003F	BCR2004F	BCR2010F	BCR2012F
Ordering number BCR Male	BCR2002M	BCR2003M	BCR2004M	BCR2010M	BCR2012M
Locking Sleeve Type:	LS-2000	LS-2000	LS-2000	LS-2000	LS-2000
Mating Cable	SCIL2F/M	SCIL3F/M	SCIL4F/M	MCIL10F/M	MCIL12F/M

METAL SHELL 2400 SERIES

2400 FCR (flange)



2400 BCR (hex)

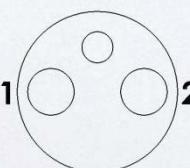
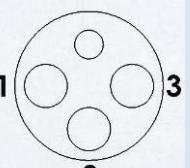
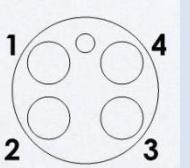
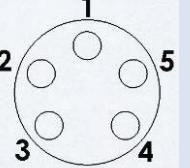
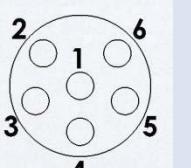
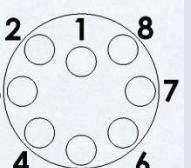
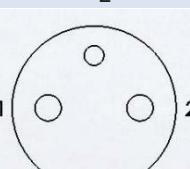
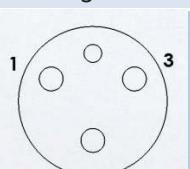
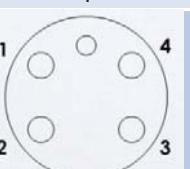
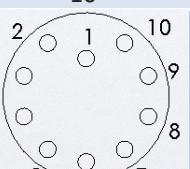
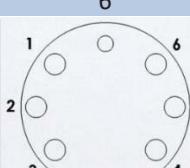
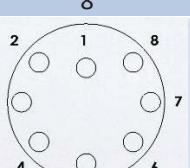
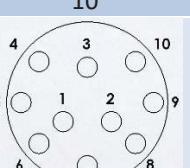


METAL SHELL 2400 SERIES Data Table

Number of contacts	6	8	10
Ordering number FCR Female	FCR2406F	FCR2408F	FCR2410F
Ordering number FCR Male	FCR2406M	FCR2408M	FCR2410M
Ordering number BCR Female	BCR2406F	BCR2408F	BCR2410F
Ordering number BCR Male	BCR2406M	BCR2408M	BCR2410M
Locking Sleeve Type:	LS-2400	LS-2400	LS-2400
Mating Cable	SCIL6F/M	SCIL8F/M	SCIL10F/M

METAL SHELL data

Contact Layout – METAL SHELL

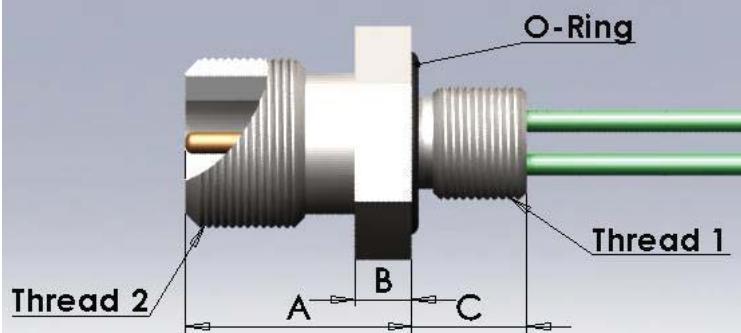
# contacts	2	3	4	5	6	8
Contact layout 1500 series (Female)						
Contact layout 2000 series (Female)						
Contact layout 2400 series (Female)						

Specification - METAL SHELL

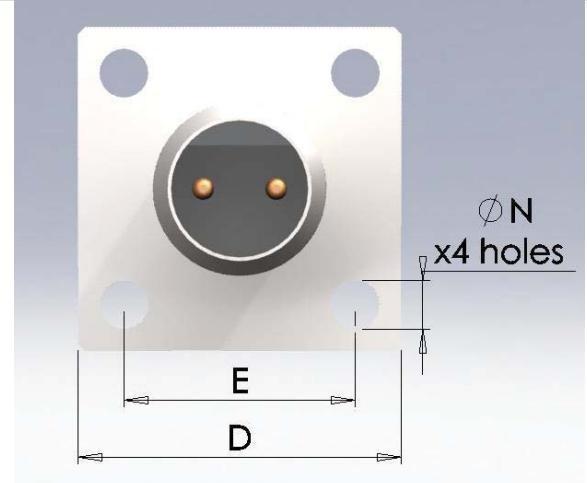
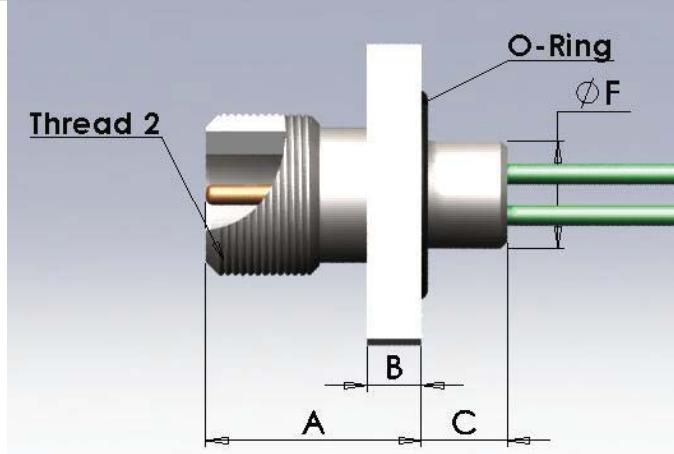
Operational		Material	
Max Current	1500 series: 8A 2000 series: 12A 2400 series: 12A	Molding	Low Carbon Neoprene
Max Voltage	1500 series: 300V 2000 series: 600V 2400 series: 600V	Bulkhead	316 Stainless, Titanium
Insulation [mega ohm]	1500 series: 200 2000 series: 250 2400 series: 250	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Phosphor Bronze
Matings	>750	Sockets	Beryllium Copper
Temperature	-5C - +65C	Location Pin	316 Stainless
Depth	>600 bar	BH leads	1500 series: 30cm, AWG 20 Teflon, (0.6 mm ²) 19/32 stranding 2000 series, 2,3,4 contacts: 30cm, AWG 18 Teflon, (0.97 mm ²) 19/30 stranding 2000 series, 10,12 contacts: 30cm, AWG 20 Teflon, (0.6 mm ²) 19/32 stranding 2400 series: 30cm, AWG 18 Teflon, (0.97 mm ²) 19/30 stranding

5500 SERIES

BCR (5507)



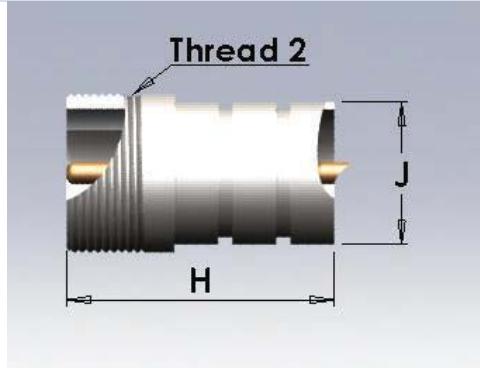
FCR (5506)



CCR (5502)



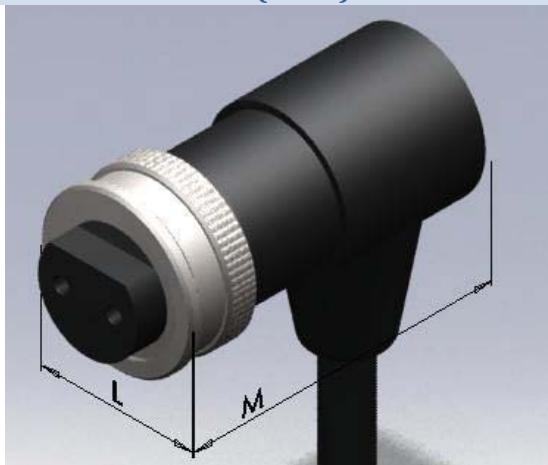
CCR-AT (55A2)



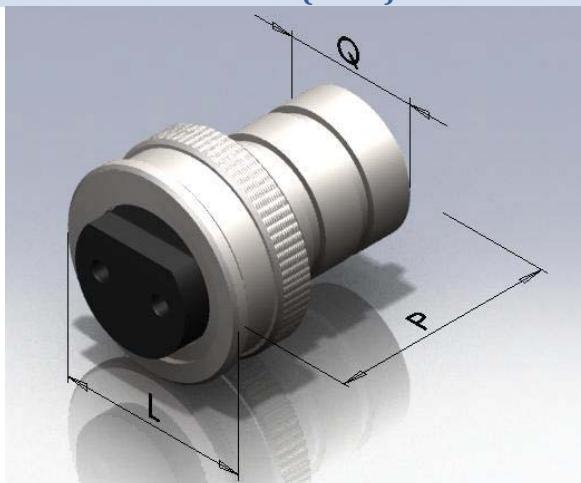
CCP (5501)



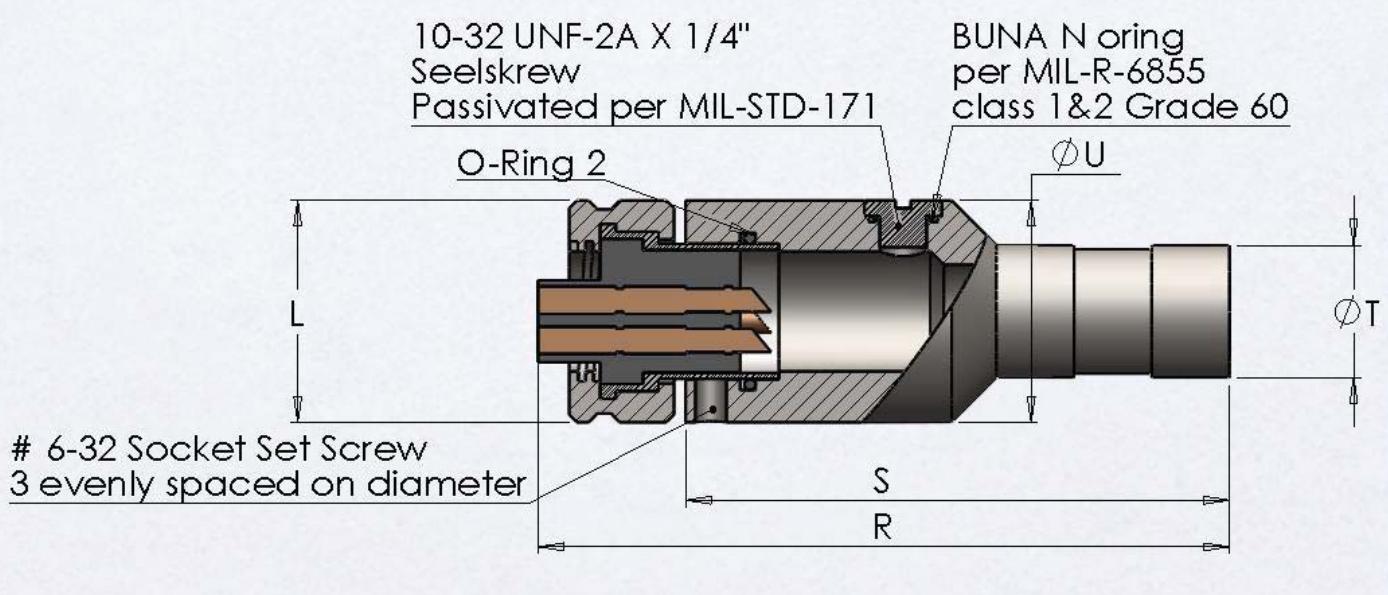
CCP-RA (55R1)



CCP-AT (55A1)



PBOF (55P1)



5500 SERIES Data Table			
Shell Size	15	20	24
O-Ring (Nitrile)	2-116	2-118	2-122
Thread 1	5/8-18UNF-2A	3/4-16UNF-2A	1-14UNF-2A
Thread 2	15/16-20	11/4-9	11/2-9
HEX [mm]	28.4(1.12 IN.)	31.8(1.25 IN.)	38.1(1.5 IN.)
O-Ring 2	Contact MFG.	Contact MFG.	Contact MFG.
Dim. A [mm]	31.8	38	38.1
Dim. B [mm]	8	9.5	9.5
Dim. C [mm]	12.7	12.7	12.7
Dim. D [mm]	38	44.5	50.8
Dim. E [mm]	25.4	31.8	38.1
Dim. F [mm]	17.2	18.9	25.15
Dim. G [mm]	45.2	62	124
Dim. H [mm]	37.3	40.4	42.7
Dim. J [mm]	19.8	27	33.5
Dim. K [mm]	45.2	62	124
Dim. L [mm]	27.7	38	44.5
Dim. M [mm]	70	82	98.3
Dim. N [mm]	5.2	7	7.4
Dim. P [mm]	39.4	42	42.2
Dim. Q [mm]	17.3	27.7	33.6
Dim. R [mm]	96.52	102.62	106.43
Dim. S [mm]	69.85	74.68	81.79
Dim. T [mm]	17.07	17.07	17.07
Dim. U [mm]	28.45	38.1	44.45

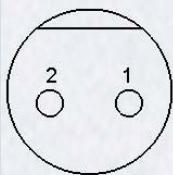
5500 SERIES Ordering Table

55	0	1	-20	13	-0003
Series	A-Attachable C-Cap (dust cap) P-Pressure Balanced (oil filled) R-Right Angle 0-600V Standard 1-1000V 2-2000V	Model Type: 1-CCP 2-CCR 6-FCR 7-BCR	Shell Size	Number Of Contacts	Length In Feet
Example:	55A1-1502-001 designates the following: series 55, attachable, model CCP, shell size 15, two contacts and length of one foot				

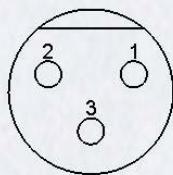
5500 series data

Contact Layout (female)- 5500 SERIES

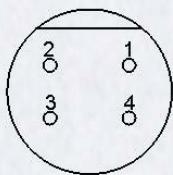
Shell size 1500



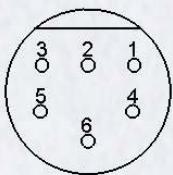
1502
AWG 14



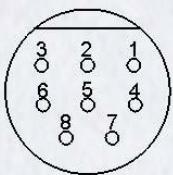
1503
AWG 14



1504
AWG 16

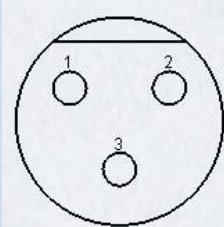


1506
AWG 16

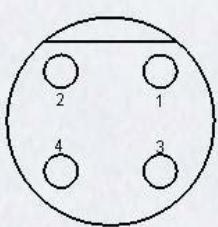


1508
AWG 16

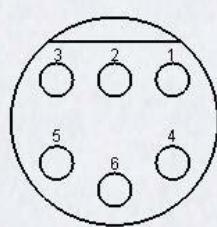
Shell size 2000



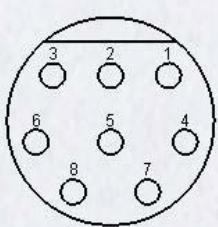
2003
AWG 10



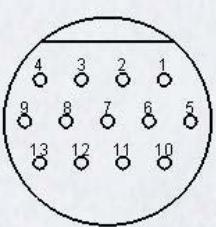
2004
AWG 10



2006
AWG 10

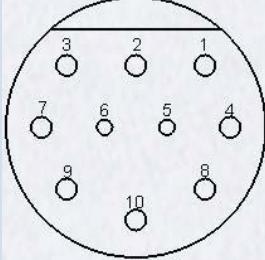


2008
AWG 14

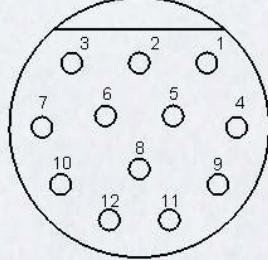


2013
AWG 16

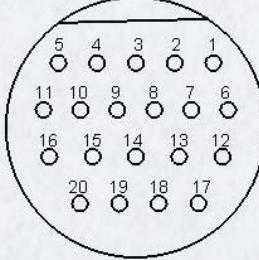
Shell size 2400



2410
8 pins are AWG 10
2 pins are AWG 14



2412
AWG 14



2420
AWG 16

Specification - 5500 SERIES

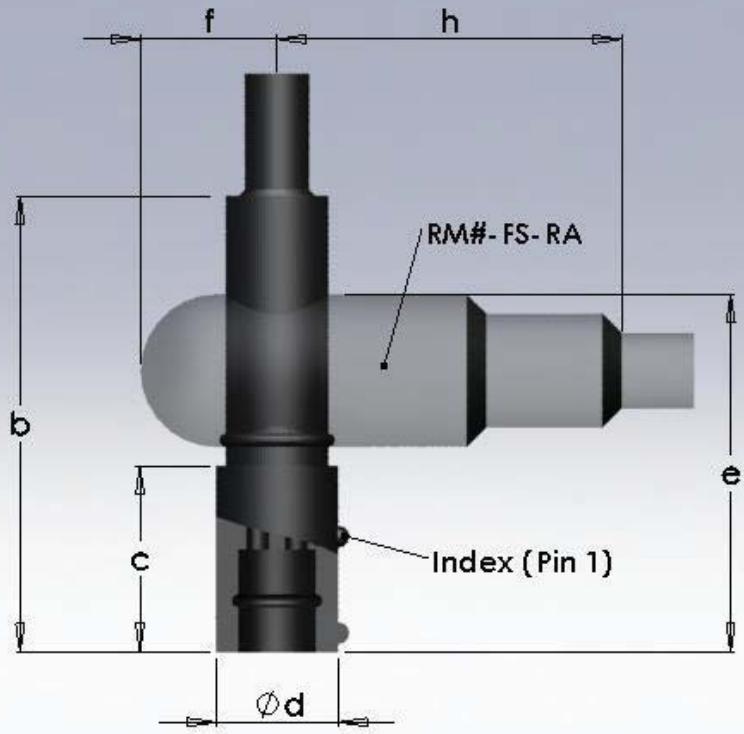
Operational		Material	
Max Current	10A: 2420 12A : 504,1506,1508,2013,2410,2412 13A: 2008 15A: 1502,1503,2006 18A: 2003,2004	Molding	Low Carbon Neoprene
Max Voltage	600V	Bulkhead	316 Stainless, Titanium (Aluminum optional for shell size 1500)
Insulation	>250 megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Brass
Matings	>500	Sockets	Beryllium Copper
Temperature	-5C - +65C	Locking Sleeve Material	316 Stainless with Teflon coated threads, Titanium
Depth	>600 bar	In-line cable	AWG 16: 60cm (1.32 mm ²) 26/30 stranding AWG 18: 60cm, (0.82 mm ²) 16/30 stranding
		BH leads	AWG 16 60cm, Teflon 19/29 AWG 18 60cm, Teflon, 19/30

Wire Color Code & Cable Diameter- 5500 SERIES

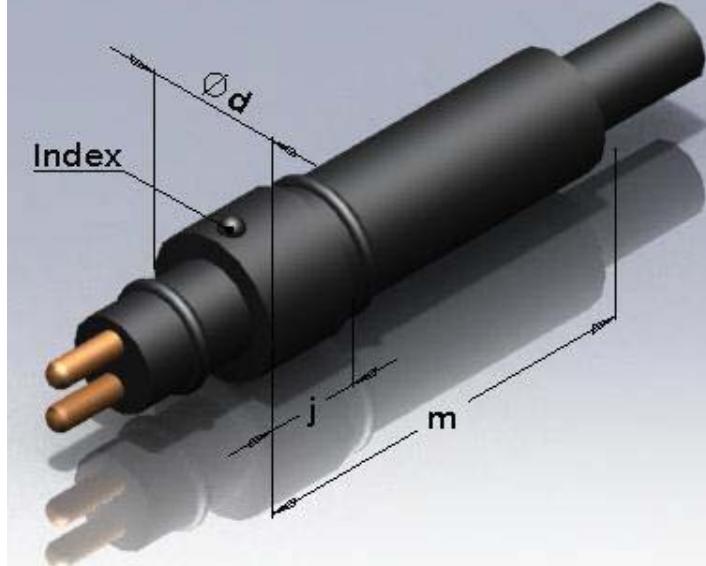
Designated wire	Number of contacts on connector								Contact manufacturer
	2	3	4	6	8	12	13	20	
Wire 1	Black	Black	Black	Black	Black	Black	Black	Black	
Wire 2	White	White	White	White	White	White	White	White	
Wire 3		Green	Red	Red	Red	Red	Red	Red	
Wire 4			Green	Green	Green	Green	Green	Green	
Wire 5				Orange	Orange	Orange	Orange	Orange	
Wire 6					Blue	Blue	Blue	Blue	
Wire 7						White/Black	White/Black	White/Black	
Wire 8						Red/Black	Red/Black	Red/Black	
Wire 9							Green/Black	Green/Black	
Wire 10							Orange/Black	Orange/Black	
Wire 11							Blue/Black	Blue/Black	
Wire 12							Black/White	Black/White	
Wire 13								Red/White	
Cable OD [mm]	8	14.2	15.2	18.3	15.1	16	16	18.2	

Rubber Molded (RM)

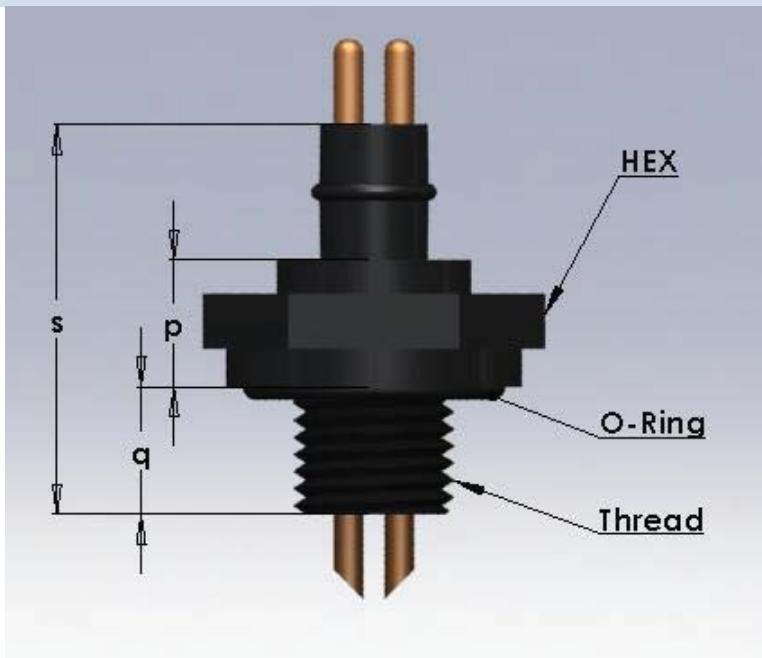
RM#-FS



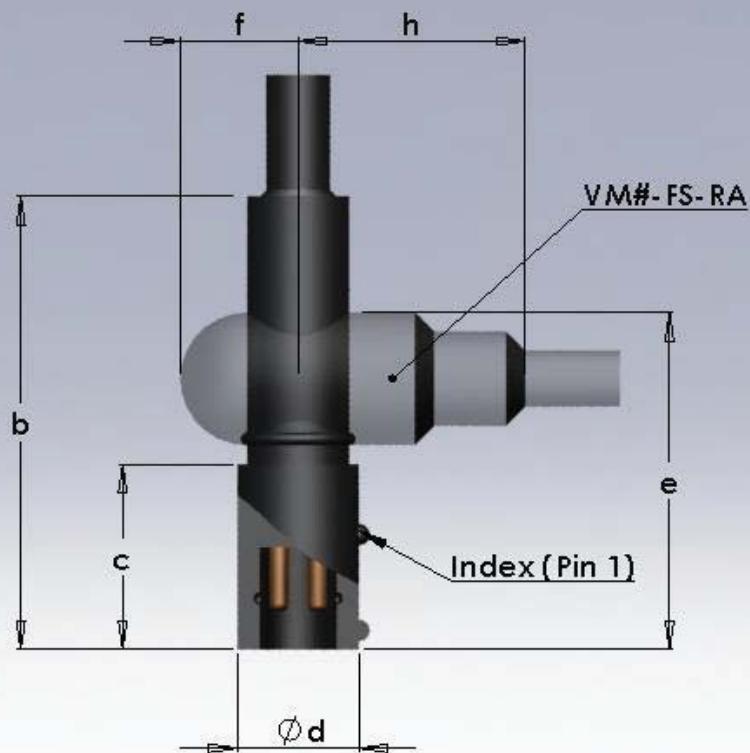
RM#-MP



XS#-BCL



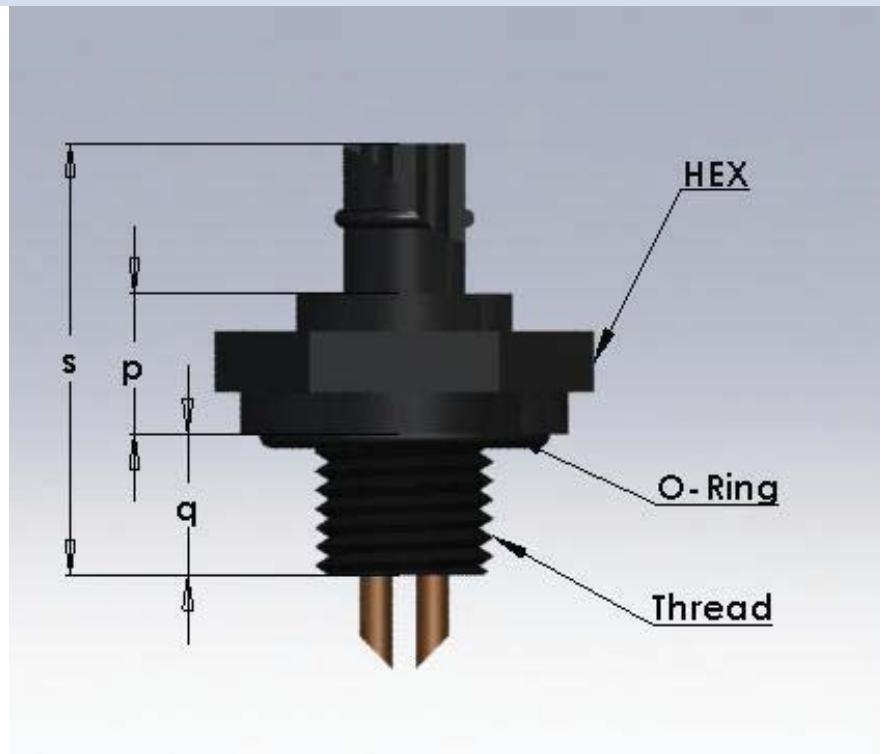
VM#-FS



VM#-MP



VS#-BCL



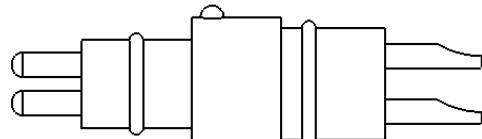
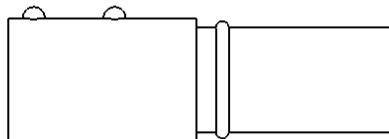
Rubber Molded Attached (RM-AT)

The Rubber Molded FS and MP can be ordered with the suffix AT which designates "Attached" to enable the user to terminate his own cable. Comes with a boot and connector. Does not include polyurethane potting kit.

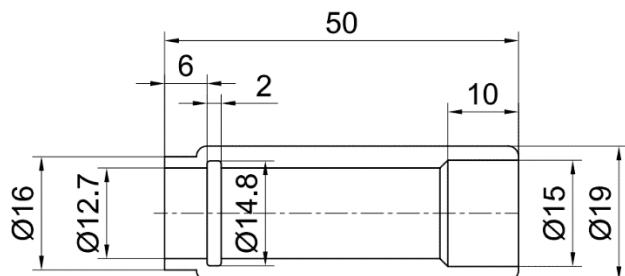
RMG-#FS-AT



RMG-#MP-AT



RMG-AT-BOOT



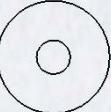
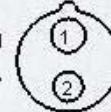
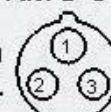
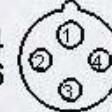
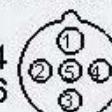
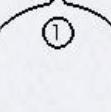
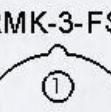
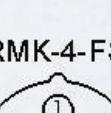
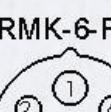
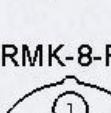
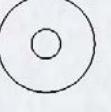
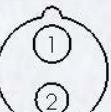
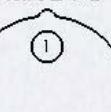
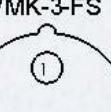
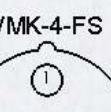
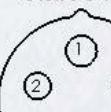
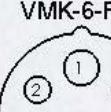
Available Female Variations	Available Male Variations
RMG-2FS-AT	RMG-2MP-AT
RMG-3FS-AT	RMG-3MP-AT
RMG-4FS-AT	RMG-4MP-AT
RMG-5FS-AT	RMG-5MP-AT
RMG-6FS-AT	RMG-6MP-AT
RMG-6FS-RADIAL-AT	RMG-6MP-RADIAL -AT

RM data

Specification - RM			
Operational		Material	
Max Current	12A	Molding	Low Carbon Neoprene
Max Voltage	600V	Bulkhead	Glass reinforced epoxy
Insulation	>250megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Brass
Matings	>750	Sockets	Beryllium Copper
Temperature	-5C - +65C	Location Pin	316 Stainless
Depth	>600 bar	In-line cable	60cm, AWG 18 (0.82 mm ²) 16/30 stranding

RM Data Table			
	Size A	Size G	Size K
Dim. b [mm]	65	73.5	68
Dim. c [mm]	36	28.5	41
Dim. d [mm]	8	19	27
Dim. e [mm]	N/A	54	68
Dim. f [mm]	8.9	19	19
Dim. h [mm]	28	47	47
Dim. j [mm]	16	13	19
Dim. m [mm]	49.5	58.5	46
Dim. p [mm]	4.6	16	16
Dim. q [mm]	15.7	16	25.4
Dim. s [mm]	30.2	48	54
HEX [mm]	11.2	35	41
O-Ring	2-012	2-213	2-217
Thread	5/16-24 UNF-2	3/4-16 UNF-2	1-14 NS-2A

RM Ordering System								Locking sleeve
Size	contacts	RM#-FS	RM#-MP	XS#-BCL	VM#-FS	VM#-MP	VS#-BCL	
A	1	RMA1FS	RMA1MP	XSA1BCL	VMA1FS	VMA1MP	VSA1BCL	FLS-RMA p/n 63A-014 material: Delrin
G	2	RMG2FS	RMG2MP	XSG2BCL	VMG2FS	VMG2MP	VSG2BCL	FLS-G p/n 63A-004 material: Delrin
	3	RMG3FS	RMG3MP	XSG3BCL	VMG3FS	VMG3MP	VSG3BCL	
	4	RMG4FS	RMG4MP	XSG4BCL	VMG4FS	VMG4MP	VSG4BCL	
	5	RMG5FS	RMG5MP	XSG5BCL	VMG5FS	VMG5MP	VSG5BCL	
	6	RMG6FS	RMG6MP	XSG6BCL	VMG6FS	VMG6MP	VSG6BCL	
	6*	RMG6FS-RADIAL	RMG6MP-RADIAL	XSG6BCL-RADIAL				
K	2	RMK2FS	RMK2MP	XSK2BCL	VMK2FS	VMK2MP	VSK2BCL	FLS-K p/n 63A-020 material: Delrin
	3	RMK3FS	RMK3MP	XSK3BCL	VMK3FS	VMK3MP	VSK3BCL	
	4	RMK4FS	RMK4MP	XSK4BCL	VMK4FS	VMK4MP	VSK4BCL	
	5	RMK5FS	RMK5MP	XSK5BCL	VMK5FS	VMK5MP	VSK5BCL	
	6	RMK6FS	RMK6MP	XSK6BCL	VMK6FS	VMK6MP	VSK6BCL	
	8	RMK8FS	RMK8MP	XSK8BCL	VMK8FS	VMK8MP	VSK8BCL	

Contact Layout - RM			
RMA(contacts:1)	RMG(contacts:2,3,4,5,6)	RMK(contacts:2,3,4,5,6,8)	
RMA-1FS 1#16 	RMG-2FS 1#10 1#14  RMG-3FS 1#10 2#14  RMG-6FS-RADIAL 1#14 5#16 	RMG-4FS 1#14 3#16  RMG-5FS 1#14 4#16  RMG-6FS 1#14 5#16 	RMK-2-FS 1#10 1#14  RMK-3-FS 1#10 2#14  RMK-4-FS 1#10 3#14  RMK-5-FS 1#10 4#14  RMK-6-FS 1#14 5#16  RMK-8-FS 1#14 7#16 
VMA(contacts:1) VMA-1FS 1#16 	VMG-2FS 1#10 1#14  VMG-3FS 1#10 2#14  VMG-4FS 1#14 3#16 	VMG(contacts:2,3,4)	VMK(contacts:2,3,4,5,6,8) VMK-2-FS 1#14 1#16  VMK-3-FS 1#14 2#16  VMK-4-FS 1#14 3#16  VMK-5-FS 1#14 4#16  VMK-6-FS 1#14 5#16  VMK-8-FS 1#14 7#16 

Mating Options Within The RM Family				
RMA-FS	Mates to	RMA-MP	And	XSA-BCL
VMA-FS	Mates to	VMA-MP	And	VSA-BCL
RMG-FS	Mates to	RMG-MP	And	XSG-BCL
VMG-FS	Mates to	VMG-MP	And	VSG-BCL
RMK-FS	Mates to	RMK-MP	And	XSK-BCL
VMK-FS	Mates to	VMK-MP	And	VSK-BCL

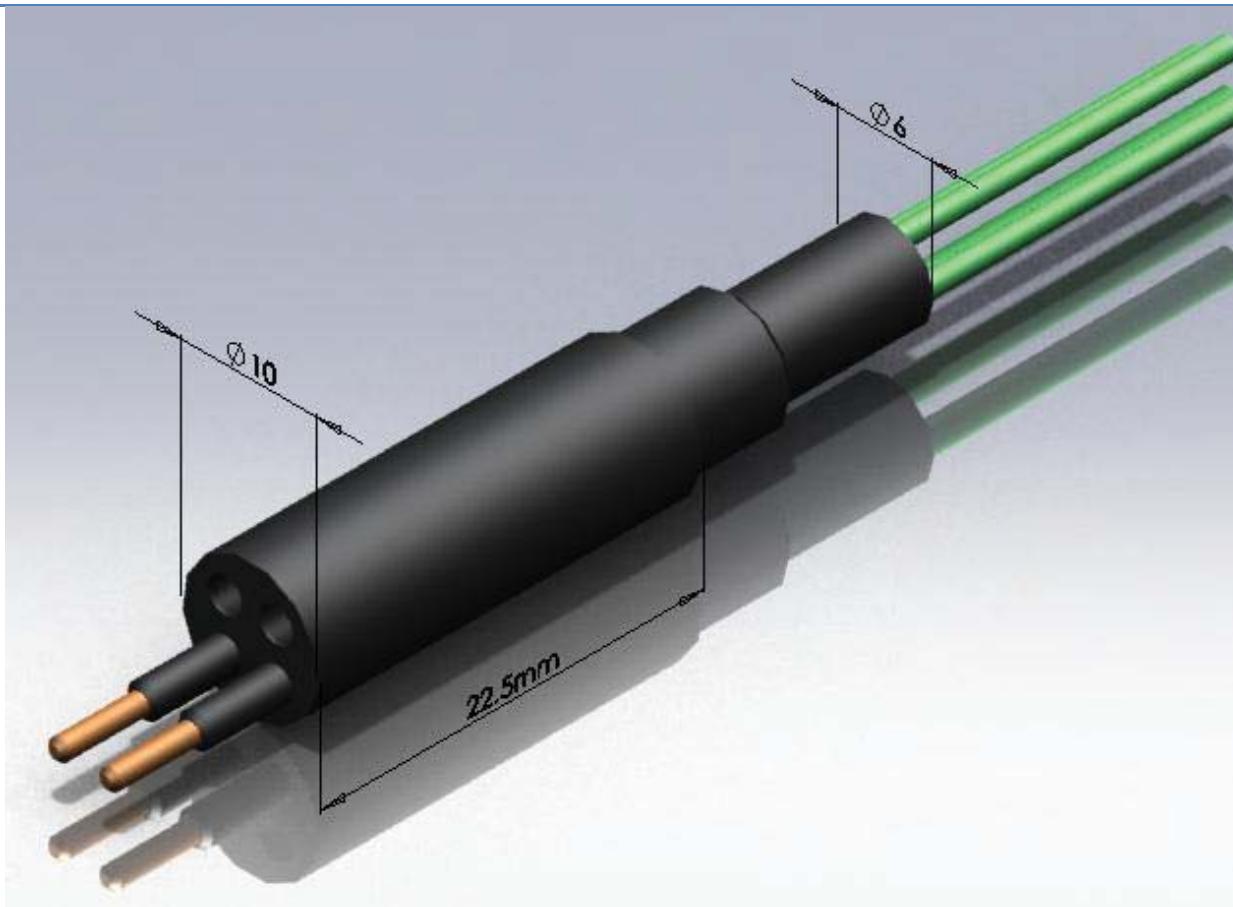
Wire Color Code RM

Designated wire	Number of contacts on connector						
	1	2	3	4	5	6	8
Wire 1	Black	Black	Black	Black	Black	Black	Black
Wire 2		White	White	White	White	White	White
Wire 3			Green	Red	Red	Red	Red
Wire 4				Green	Green	Green	Green
Wire 5					Orange	Orange	Orange
Wire 6						Blue	Blue
Wire 7							White/Black
Wire 8							Red/Black
Cable OD [mm]	3.5	7.5	8.1	9	12	12.3	13.5
Current [A]	12	12	12	12	12	10	10

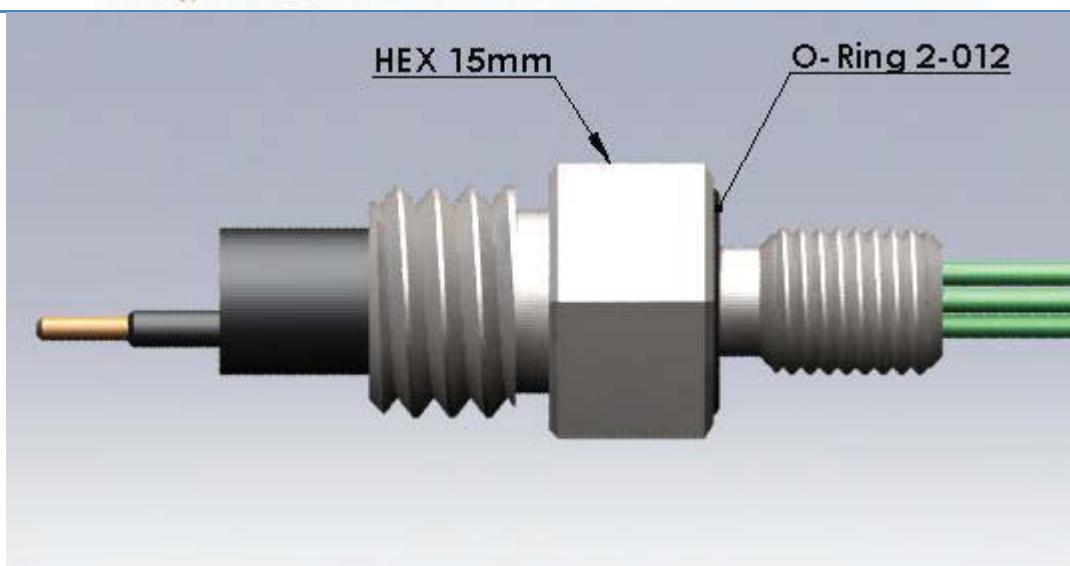
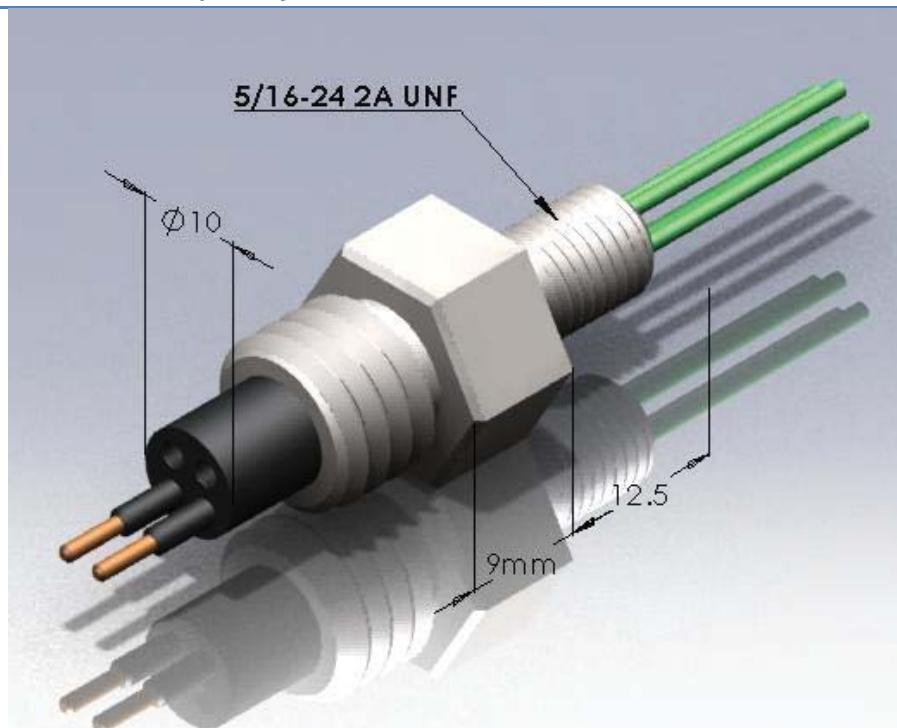
Hermaphroditic

NANO Series

NANO Inline Connector (NAIL)



NANO Data Table		
Number of contacts	2	4
Locking Sleeve Type:	NA-FLS NA-MLS	NA-FLS NA-MLS
Ordering number	NAIL2	NAIL4

NANO Bulk Head Connector (NABH)

NANO Data Table		
Number of contacts	2	4
Locking Sleeve Type:	NA-FLS NA-MLS	NA-FLS NA-MLS
Ordering number	NABH2	NABH4

NANO data

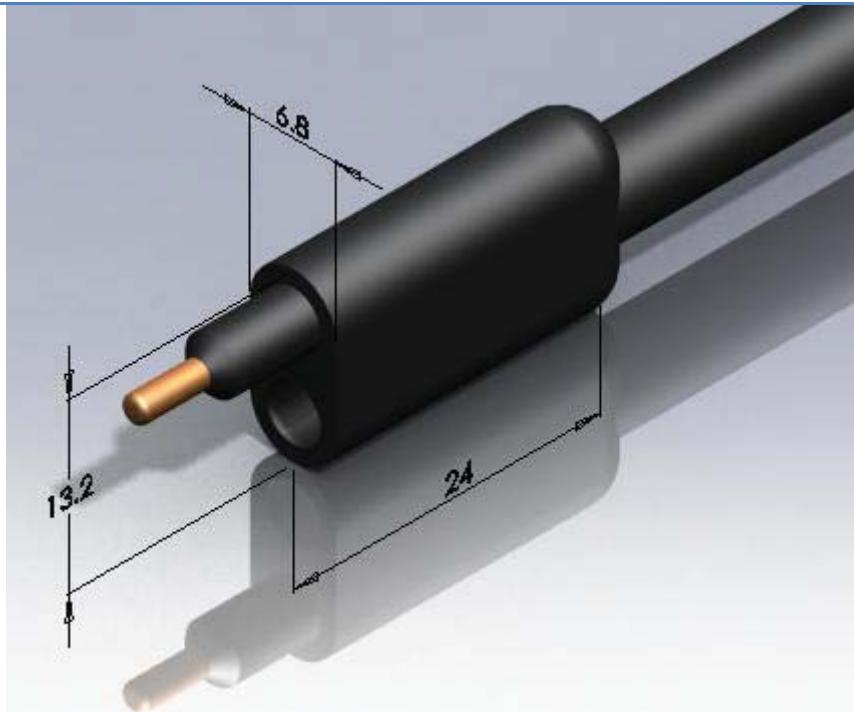
Contact Layout - NANO		
Number of contacts	4	2
Contact layout		

Specification - NANO			
Operational		Material	
Max Current	8A	Molding	Low Carbon Neoprene
Max Voltage	600V	Bulkhead	Brass, 316 Stainless
Insulation	>200 megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	5/64 Pin, Phosphor Bronze
Matings	>500	Sockets	Beryllium heat treated
Temperature	-5C - +65C	In-line cable	60cm AWG20 (0.5 mm ²) 26/34 stranding
Depth	>600 bar	BH leads	30cm, AWG20 Teflon (0.6 mm ²) 19/32 stranding

Wire Color Code - NAIL		
Designated wire	Number of contacts on connector	
	2	4
Wire 1	Black	Black
Wire 2	White	White
Wire 3		Red
Wire 4		Green

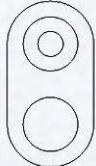
MH Series

MH Connector (MH2)



MH Data Table	
Number of contacts	2
Cable dim [mm]	6.4
Cable current [A]	7
Ordering number	MH2

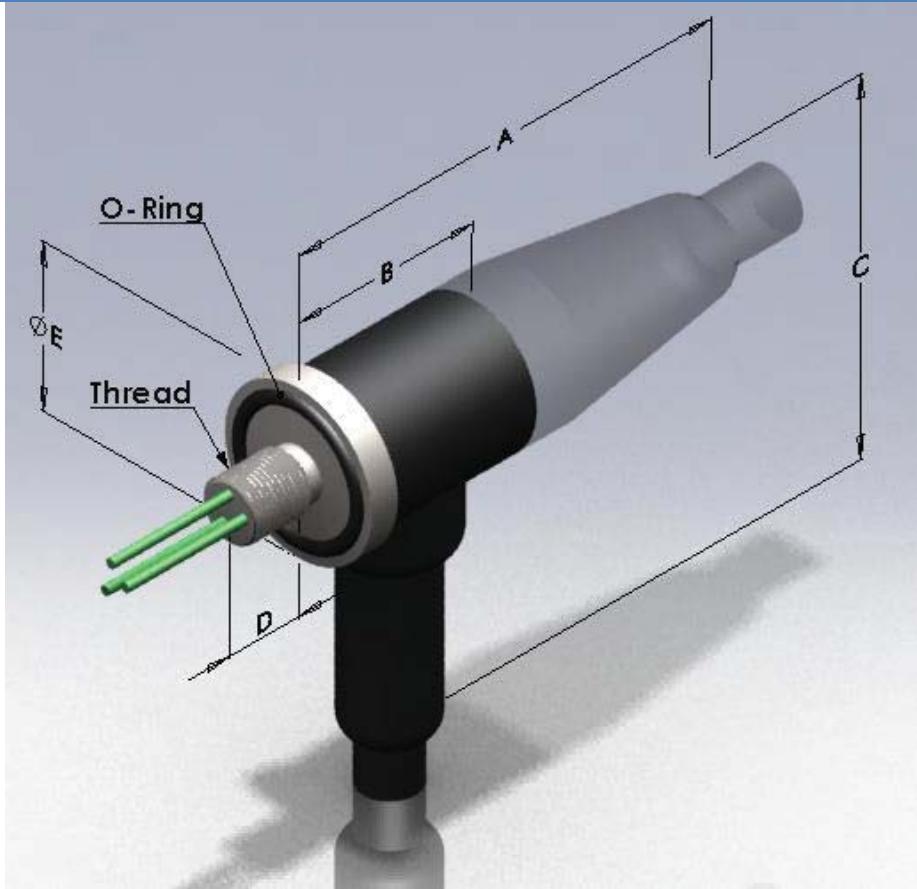
MH Data

Contact Layout - MH		
Number of contacts	2	
Contact layout		

Specification - MH			
Operational		Material	
Max Current	7A	Molding	Low Carbon Neoprene
Max Voltage	600V	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Insulation	>200 megaohm	Pin	#11, phosphor Bonze
Contacts	<0.01 ohm	Sockets	Beryllium heat treated
Matings	>500	In-line cable	60cm AWG20 (0.5 mm ²) 26/34 stranding
Temperature	-5C - +65C		
Depth	>600 bar		

Wire Color Code - MH	
Designated wire	Number of contacts on connector
	2
Wire 1	Black
Wire 2	White

Penetrator (PN)



PN Data Table		
	Size B	Size C
Dim. A [mm]	63.5	106
Dim. B [mm]	28.2	36
Dim. C [mm]	60.5	67
Dim. D [mm]	16	25
Dim. E [mm]	25.4	38
O-Ring [material: Nitrile]	2-017	2-213
Thread	1/2-20 UNF-2A	3/4-16 UNF-2A
Ordering number	PN-B#	PN-C#
Ordering number for "Right Angle"	PN-B#-RA	PN-C#-RA
Not: # stands for number of conductors	Examples: For B size with 6 wires: "PN-B6" For C size with 4 wires that is right angled: "PN-C4-RA"	

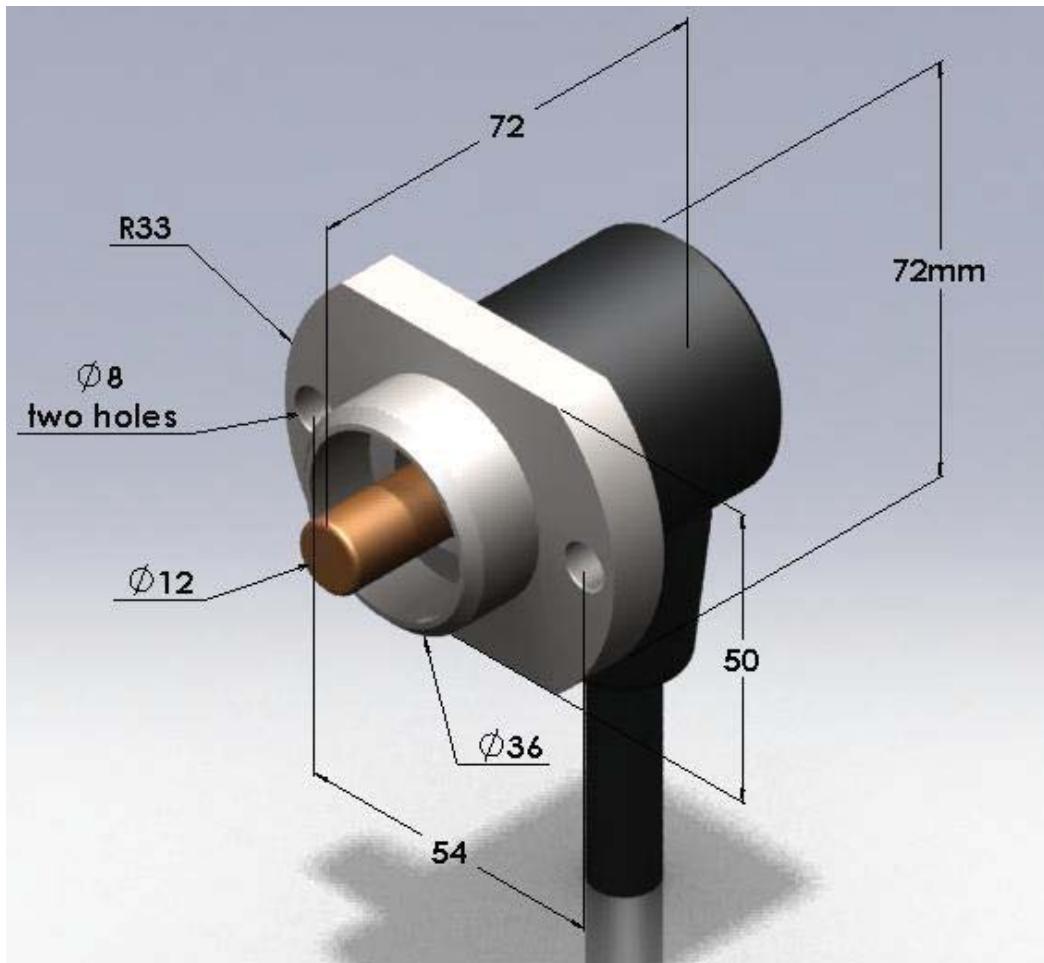
PN data

Specification - PN							
Operational				Material			
Max Current		15A		Molding		Low Carbon Neoprene	
Max Voltage		600V		Threaded Insert		316 Stainless, Titanium	
Insulation		>250megaohm		In-line cable		AWG 18 (0.82 mm ²) 16/30 stranding AWG 20, AWG 16 also available upon request	
Contacts		<0.01 ohm					
Temperature		-8C - +70C					
Depth		>700 bar					

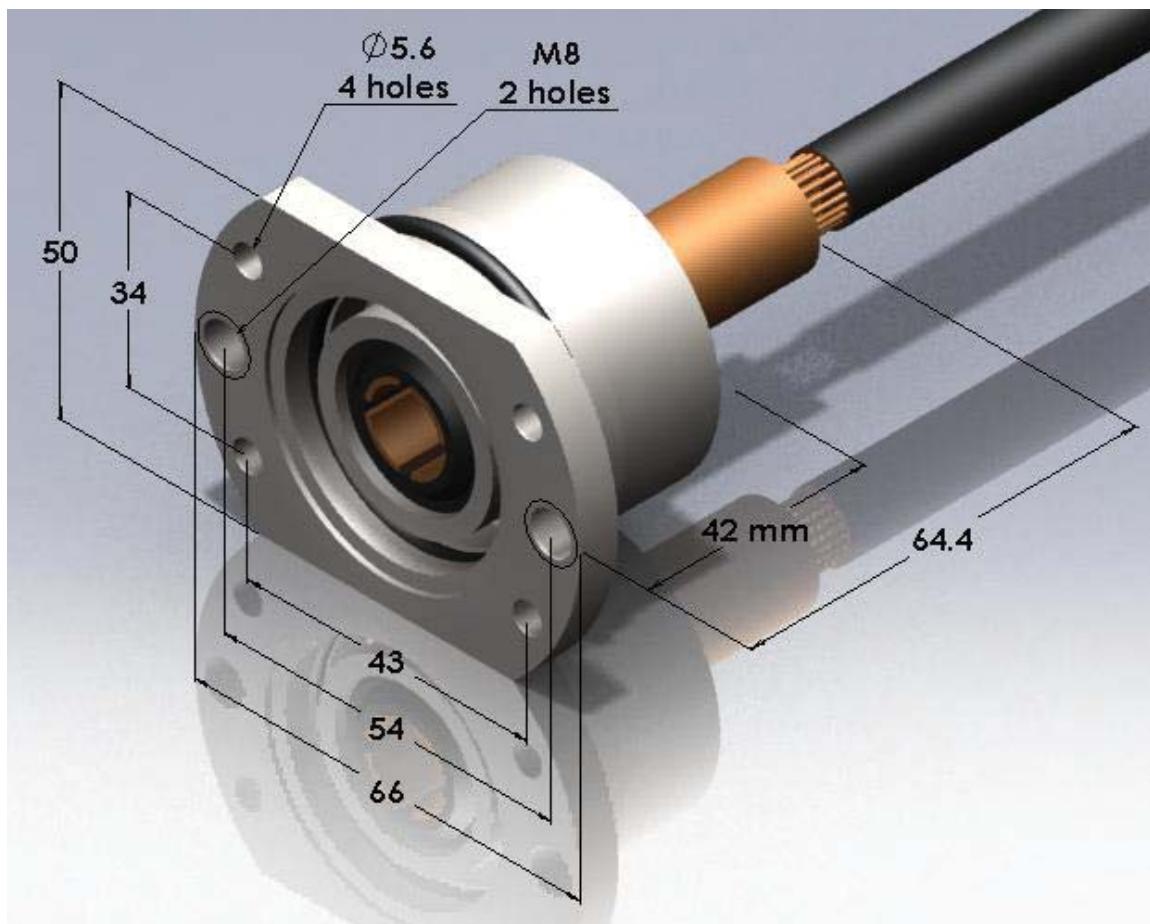
Cable Diameter And Current PN							
Number of wires	2	3	4	5	6	7	8
Cable OD [mm]	7.5	8.1	9	12	12.3	13	13.5
Current [A]	12	12	12	12	10	10	10
Note:	For additional wire numbers and ratings contact manufacturer						

300A

300A Cable Plug (300A-CP)

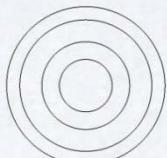


300A-CP Data Table	
Number of contacts	1
Ordering number	300A-CP

300A Flange Receptacle (300A-FR)

300A-FR Data Table	
Number of contacts	1
Ordering number	300A-FR

300A data

Contact Layout – 300A	
Number of contacts	1
Contact layout	

Specification – 300A			
Operational		Material	
Max Current	300A	Molding	Low Carbon Neoprene
Max Voltage	300V	Bulkhead	316 Stainless
Insulation	>200 megaohm	Contacts	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
Contacts	<0.01 ohm	Pin	Phosphor Bronze
Matings	>500	Sockets	Brass
Temperature	-5C - +65C	In-line cable	AWG 2/0 , 1248/30 stranding, EPDM jacket
Depth	>300 bar	BH leads	Per order

APPENDICES

Appendix A: Compatibility table

Manufacturer Compatibility Table												
	Birns Aquamate Families											
	SC	HD	MC	LP	FL/FM	FAWL/FAWM	METAL SHELL	5500	RM	HERMAPHRODITIC	300A	
SUBCONN	YG	N	YG*	YG	NA	NA	YG	NA	NA	NA	NA	
SEACON	Y	N	Y	Y	N	YG	NA	L	YG	NA	NA	
IMPULSE	Y	N	Y	Y	N	N	NA	NA	L	NA	NA	
BURTON	NA	NA	NA	NA	NA	NA	NA	YG	NA	NA	NA	
Legend	YG - YES GUARANTEED Y - YES L - LIKELY N - NO NA - NOT APPLICABLE											
*	For MC 9-16 you must choose the MC-SU subfamily for SUBCONN compatibility											

Appendix B: Locking Sleeve table

Match locking sleeve to connector				
		Appropriate Connectors		
Locking sleeve number	FLS-A MLS-A	SC 2-5	MC-SU 9-16	HD 2-4
	FLS-B MLS-B	SC 6-10		
	FLS-C MLS-C	SC 12,16		
	FLS-MC MLS-MC	MC 2-8		METAL SHELL 1500
	FLS-MCA MLS-MCA	MC 9-16		
	FLS-RMA	RM size A		
	FLS-G	RM size G		
	FLS-K	RM size K		
	NA-FLS NA-MLS	NANO		
	LS-2000	METAL SHELL 2000		
Note:	<ul style="list-style-type: none"> • FLS- female locking sleeve • MLS-male locking sleeve • For inline to bulkhead connection use FLS • For inline to inline connections use pair (MLS and FLS) 			