

# Amphenol®



**Submariner**

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## Amphenol® Submariner Series Dry and Wet-Mateable Connectors

Amphenol Oil and Gas, a division of Amphenol Industrial Global Operations, now offers a variety of dry-mate and wet-mate connectors. With versatile design and exceptional manufacturing techniques, Amphenol connectors can withstand the harshest underwater conditions. Our interconnects are highly sought out by leading oil and gas exploration companies for their ability to excel in the most demanding environments.

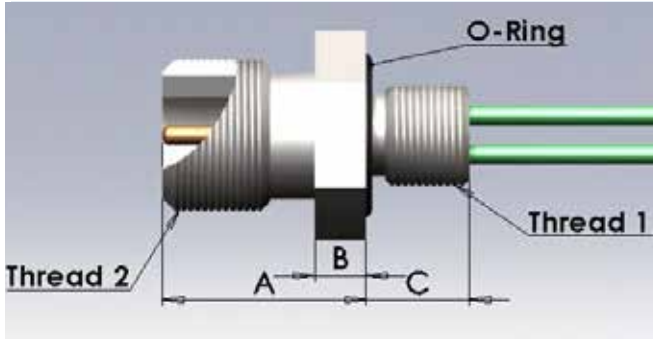
### Applications:

The Submariner series of connectors has been used in many diverse applications including diving equipment, ROV's, submersible pumps, and underwater cameras.

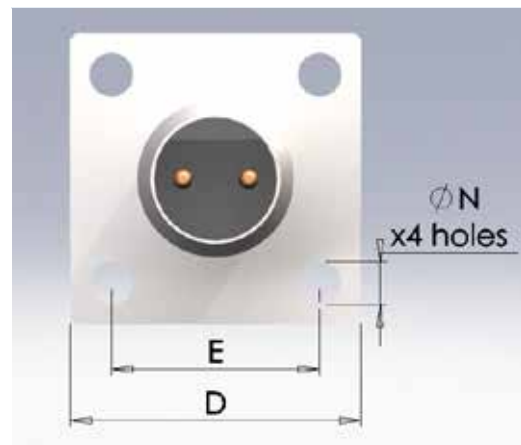
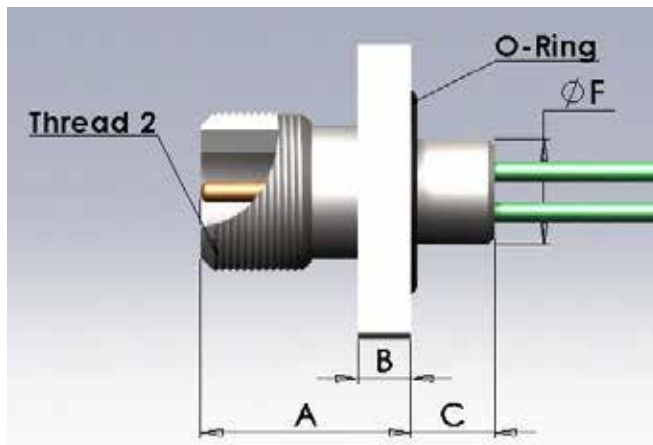
	Dry-Mate	Wet-Mate
5500 Series	•	
Flat		•
Metal Shell	•	
Mini Connector		•
Penetrator	•	
Rubber Molded	•	
Standard Circular		•
Options:	Amphenol supplies standard and custom connectors. Customized connectors and cable assemblies are available to suit customers' needs.	

# 5500 SERIES

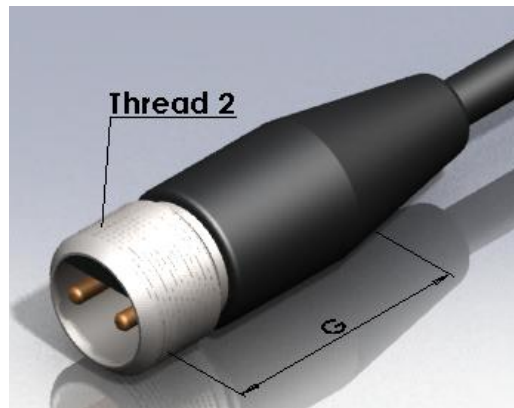
## BCR (5507)



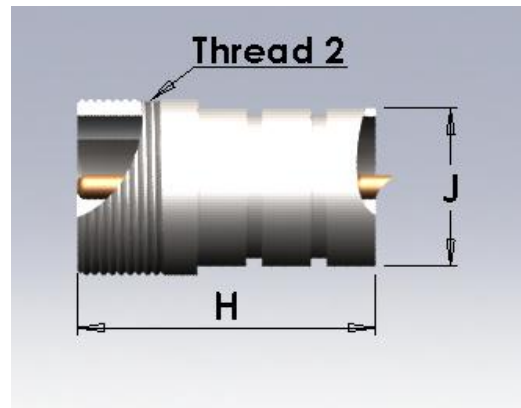
## FCR (5506)



## CCR (5502)

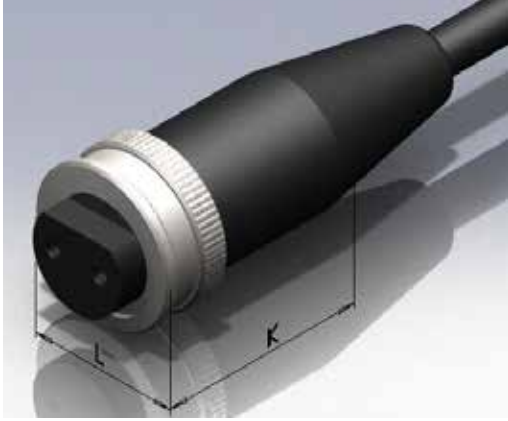


## CCR-AT (55A2)

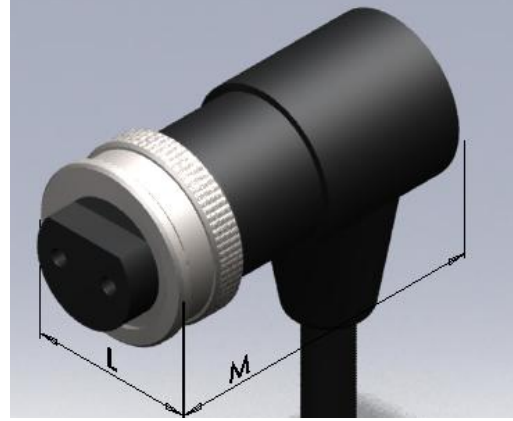


# 5500 SERIES

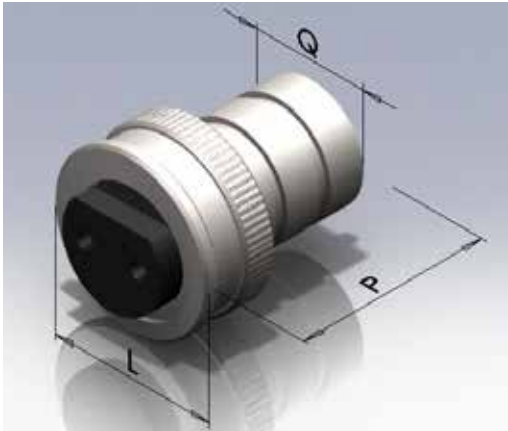
## CCP (5501)



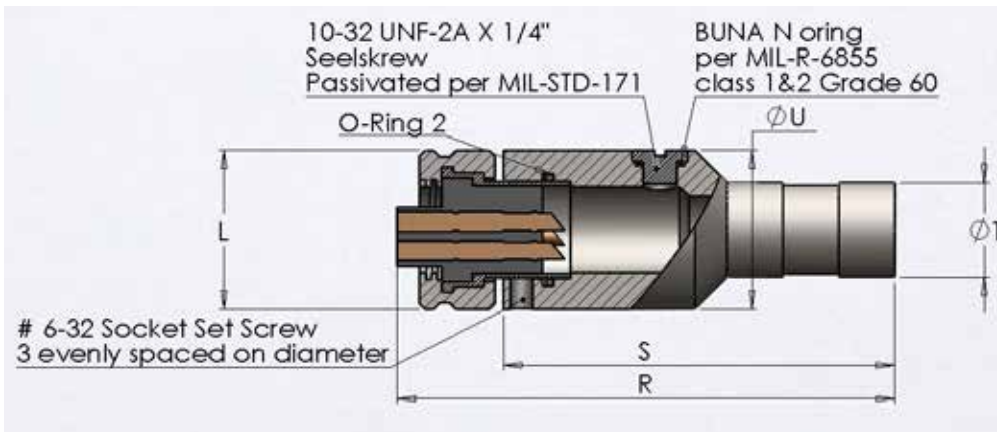
## CCP-RA (55R1)



## CCP-AT (55A1)



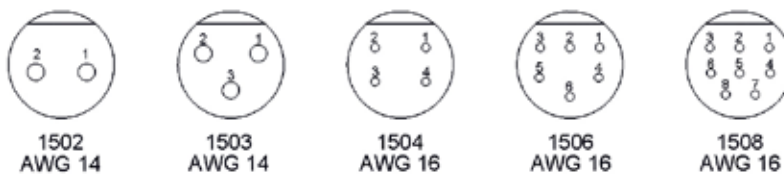
## PBOF (55P1)



# 5500 SERIES DATA

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.)
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

## SHELL SIZE 15 PIN LAYOUT



## SHELL SIZE 20 PIN LAYOUT



## SHELL SIZE 24 PIN LAYOUT



# 5500 SERIES DATA

5500 Series Specifications			
Operational		Material	
<b>Max Current</b>	10A: 2420 12A: 1504, 1506, 1508, 2013, 2410, 2412 13A: 2008 15A: 1502, 1503, 2006 18A: 2003, 2004	<b>Molding</b>	Low Carbon Neoprene
<b>Max Voltage</b>	600V	<b>Bulkhead</b>	316 Stainless, Titanium (Aluminum optional for shell size 1500)
<b>Insulation</b>	>250 megaohm	<b>Contacts</b>	Gold plated per MIL-G 45204 Type II, Grade D, Class 00
<b>Contacts</b>	<0.01 ohm	<b>Pin</b>	Brass
<b>Matings</b>	>500	<b>Sockets</b>	Beryllium Copper
<b>Temperature</b>	-5C - +65C	<b>Locking Sleeve Material</b>	316 Stainless with Teflon coated threads, Titanium
<b>Depth</b>	>600 bar	<b>In-Line Cable</b>	AWG 16: 60cm (1.32 mm <sup>2</sup> ) 26/30 stranding AWG 18: 60cm, (0.82 mm <sup>2</sup> ) 16/30 stranding
		<b>BH Leads</b>	AWG 16 60cm, Teflon 19/29 AWG 18 60cm, Teflon, 19/30

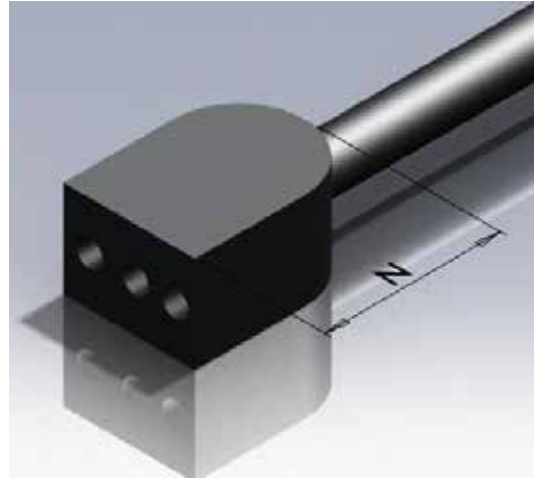
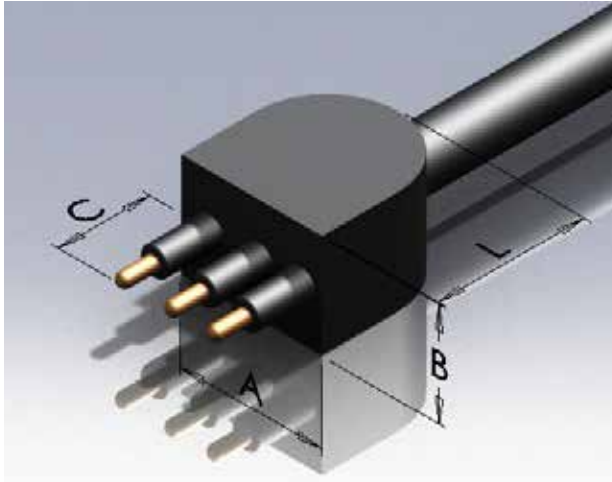
## How to order

1	2	3	4	5	6
55	A	1	-20	06	-0003
<b>Series</b>	<b>Designation</b>	<b>Model Type</b>	<b>Shell Type</b>	<b>Contact Configuration</b>	<b>Cable Length in Feet</b>
55	A-Attachable	1-CCP	15	02 (Shell Size 15 Only)	Varying length upon request
	C-Cap (Dust Cap)	2-CCR	20	13 (Shell Size 20 Only)	
	P-Pressure Balanced (Oil Filled)	6-FCR	24	03, 04, 06, 08 (Shell Sizes 15 and 20 only)	
	R-Right Angle	7-BCR		10, 12, 20 (Shell Size 24 Only)	
	0-600V Standard				
	1-1000V				
	2-2000V				

**Example:** 55A1-2006-0003 denotes; 55 Series, Attachable, model CCP, shell size 20, 2 contacts with, a length of 3 feet.

# FLAT (FAWL, FAWM)

## INLINE CONNECTOR (FAWLIL; FAWMIL)



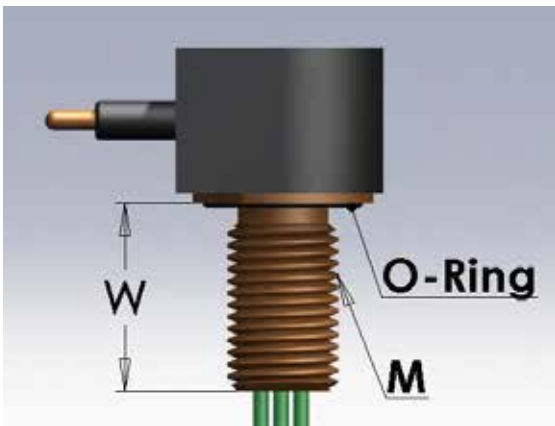
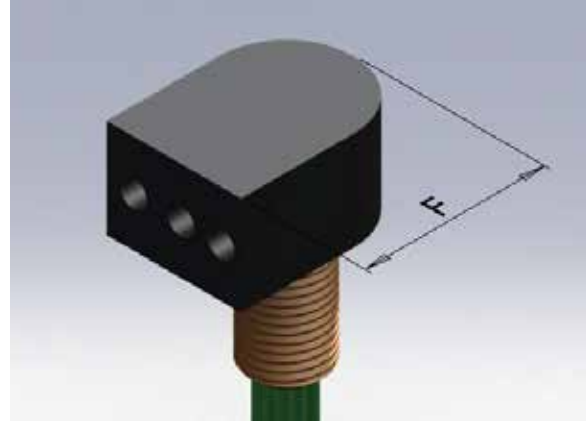
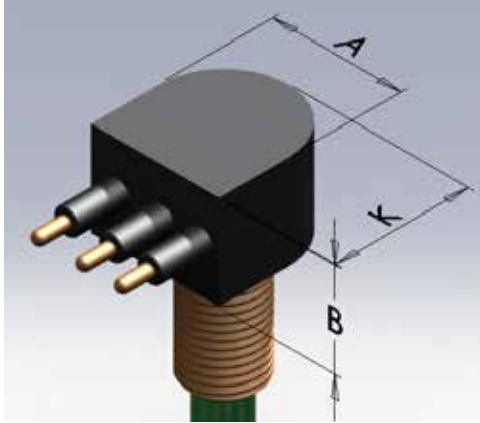
FAWLIL, FAWMIL Data Table						
Number of contacts	2	3	4	5	8	10
Dim. A [mm]	20	20	20	20	21	21
Dim. B [mm]	14.7	14.7	14.7	14.7	16	16
Dim. C [mm]	13	13	13	13	13	13
Dim. L [mm]	20.7	20.7	20.7	20.7	25	25
Dim. N [mm]	26.7	26.7	26.7	26.7	35	35
Cable OD [mm]	6	6.7	7	7.5	9.5	10
Cable current [A] FAWL/FAWM	7	7	7	7	7	7





# FLAT (FAWL, FAWM)

## BULK HEAD CONNECTOR (FAWLBH, FAWMBH)



FAWLBH, FAWMBH 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

# FAWL, FAWM DATA

FAWL, FAWM Contact Layout						
Number of contacts	2	3	4	5	8	10
Contact layout (Female)						

FAWL, FAWM Specifications			
Operational		Material	
Max Current	FAWL/FAWM: 7A	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 <sup>2</sup> ) 16/30 stranding 5-10 contacts: 60cm, AWG 20 (0.5 mm <sup>2</sup> ) 26/34 stranding
		BH leads	30cm, AWG 20 Teflon, (0.6 mm <sup>2</sup> ) 19/32 stranding

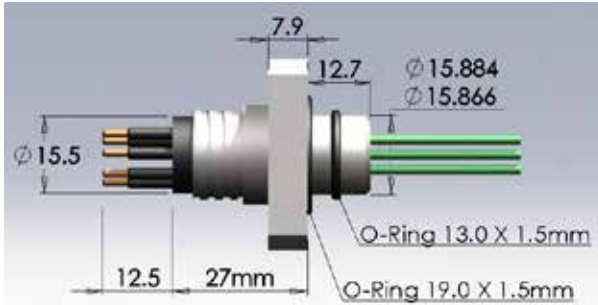
## How to order

1	2	3	4	5	6
F	AW	L	IL	2	F
Series	Designation	Size	Model Type	Contact Configuration	Description
F (Flat)	AW (All Wet)	L (2-5 Contacts)	IL (Inline)	2	F (Female Socket)
		M (8-10 Contacts)	BH (Bulkhead)	3	M (Male Plug)
				4	
				5	
				8	
				10	

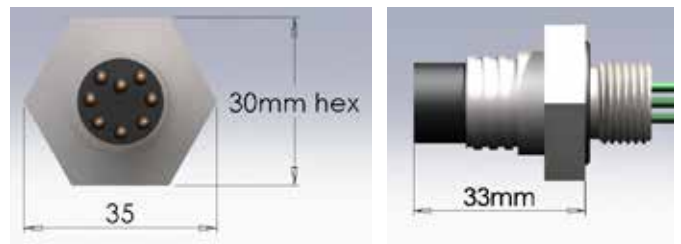
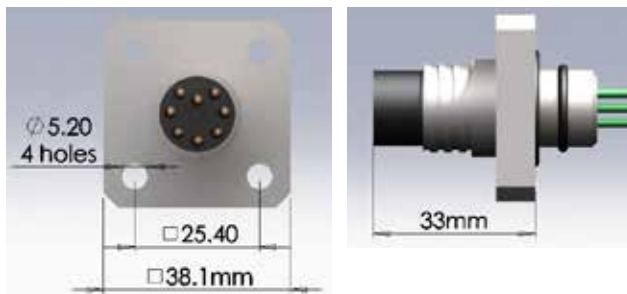
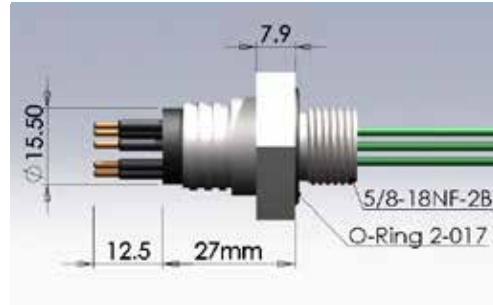
Example: FAWL-L-IL-2-F denotes; Flat, All-Wet, Size L, Inline, 2 contacts, Female Connector

# METAL SHELL 1500 SERIES

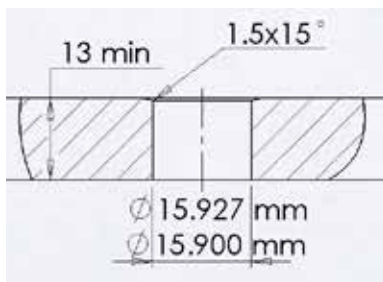
## 1500 FCR (FLANGE)



## 1500 BCR (HEX)



## 1500 FCR SOCKET

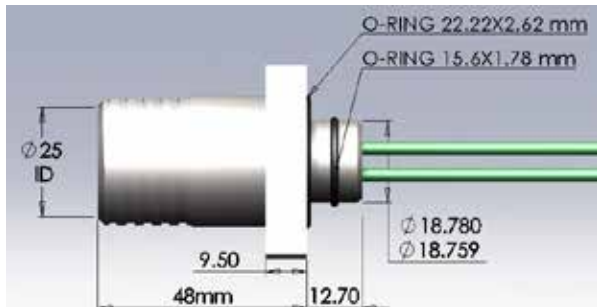


**Metal Shell 1500 Series Data Table**

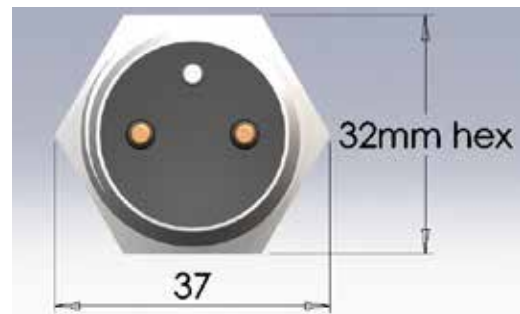
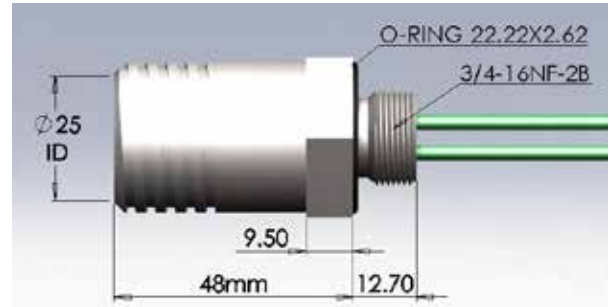
Number of contacts	2	3	4	5	6	8
Ordering number FCR Female	FCR1502F	FCR1503F	FCR1504F	FCR1505F	FCR1506F	FCR1508F
Ordering number FCR Male	FCR1502M	FCR1503M	FCR1504M	FCR1505M	FCR1506M	FCR1508M
Ordering number BCR Female	BCR1502F	BCR1503F	BCR1504F	BCR1505F	BCR1506F	BCR1508F
Ordering number BCR Male	BCR1502M	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

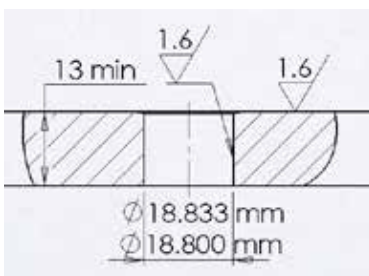
## 2000 FCR (FLANGE)



## 2000 BCR (HEX)


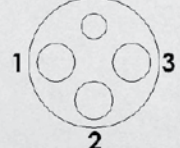
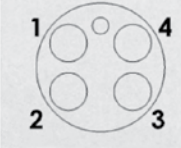
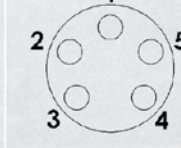
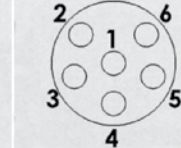
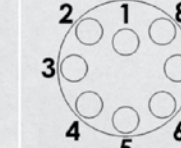
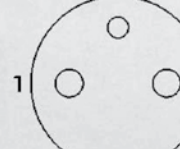
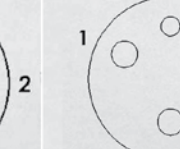
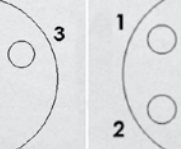


## 2000 FCR SOCKET



METAL SHELL 2000 SERIES Data Table			
Number of contacts	2	3	4
Ordering number FCR Female	FCR2002F	FCR2003F	FCR2004F
Ordering number FCR Male	FCR2002M	FCR2003M	FCR2004M
Ordering number BCR Female	BCR2002F	BCR2003F	BCR2004F
Ordering number BCR Male	BCR2002M	BCR2003M	BCR2004M
Locking Sleeve Type:	LS-2000	LS-2000	LS-2000
Note:	Compatible with SC series 2-4		

# METAL SHELL DATA

Metal Shell- Contact Layouts						
Number of contacts	2	3	4	5	6	8
Contact layout 1500 series (Female)						
Number of contacts	2	3	4			
Contact layout 2000 series (Female)						

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

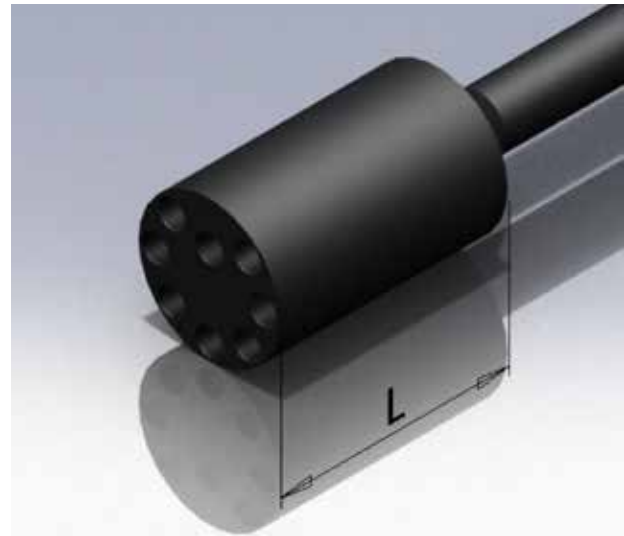
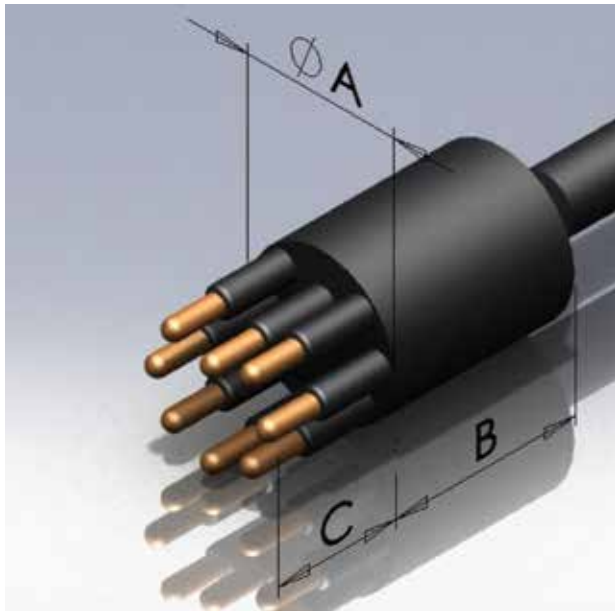
## How to order

1	2	3	4	5
MS	BGR	15	2	F
Series	Model Type	Shell Size	Contact Configuration	Description
MS (Metal Shell)		15		
	BCR (Bulkhead Receptacle)		02	
	FCR (Flange Receptacle)	20 (only 2,3,4 contacts)	03	
			04	
			05	
			06	
			08	

Example: MS-BCR-1502-F denotes; Metal Shell, Bulkhead connector receptacle, shell size 15,2 contacts, female

# MINI CONNECTOR (MC)

## Inline Connector (MCIL)

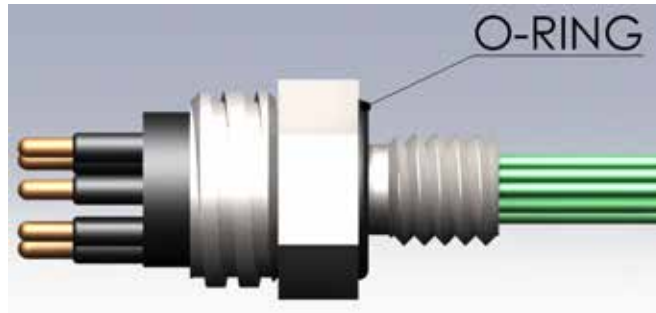
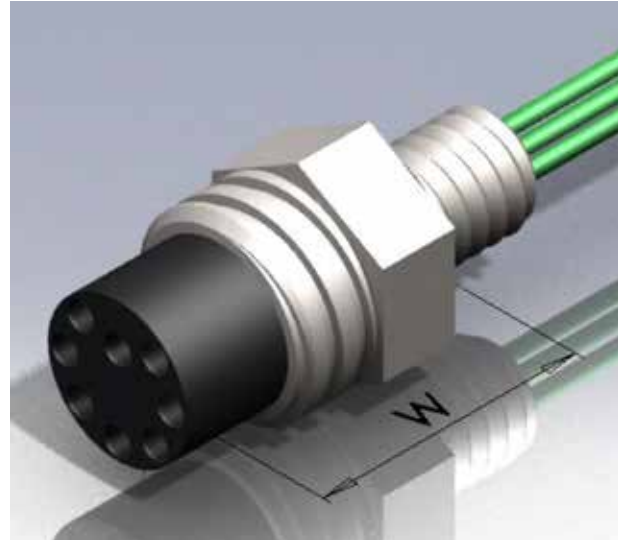
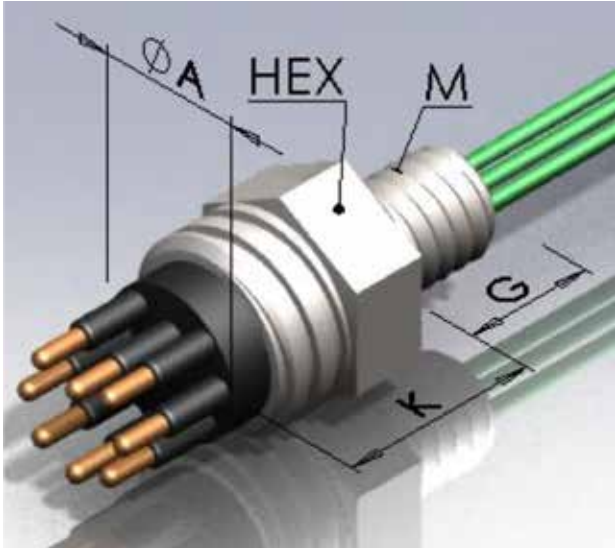


MCIL Data Table

Number of contacts	2	3	4	5	6	8	9	12	16
Dim. A [mm]	15.5	15.5	15.5	15.5	15.5	15.5	25.5	25.5	25.5
Dim. B [mm]	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
Dim. L [mm]	25	25	25	25	25	25	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-MC, MLS-MC	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA	FLS-MCA, MLS-MCA
Cable OD [mm]	6	6.7	7	7.5	8	9.5	Contact manufacturer		
Cable current [A]	8	8	8	8	7	7	Contact manufacturer		

# MINI CONNECTOR (MC)

## BULK HEAD CONNECTOR (MCBH)

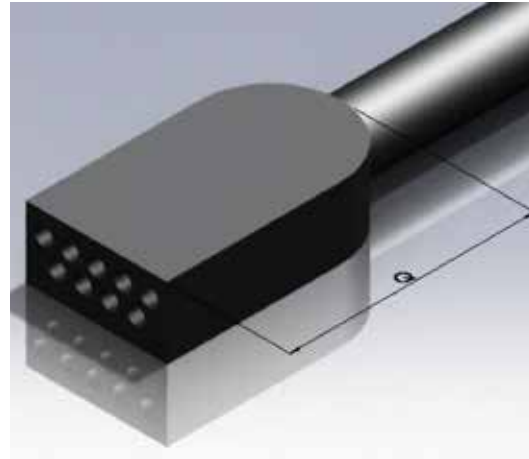
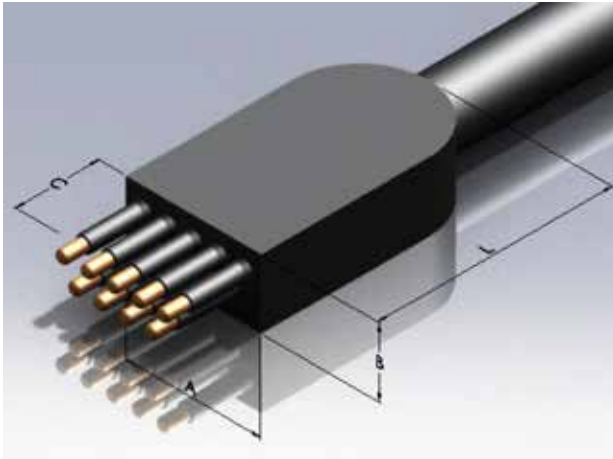


MCBH Data Table

Number of contacts	2	3	4	5	6	8	9	12	16
Dim. A [mm]	15.5	15.5	15.5	15.5	15.5	15.5	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
Dim. K [mm]	21.5	21.5	21.5	21.5	21.5	21.5	30	30	30
Dim. G [mm]	19	19	19	19	19	19	14 or 19	14 or 19	14 or 19
HEX [mm]	19	19	19	19	19	19	24	24	24
Dim. W [mm]	28	28	28	28	28	28	39	39	39
Locking Sleeve Type:	FLS-MC, MLS-MC	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

# MINI CONNECTOR (MC)

## MC LOW PROFILE INLINE CONNECTOR (MCLPIL)

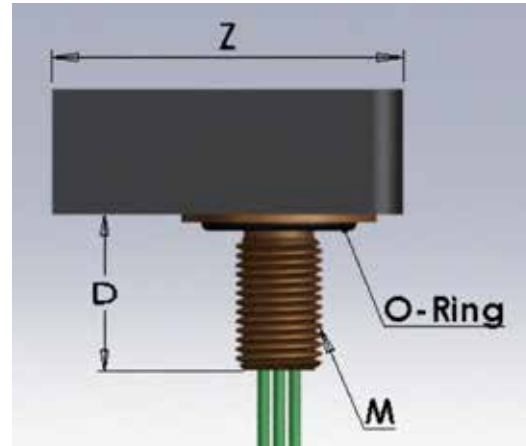
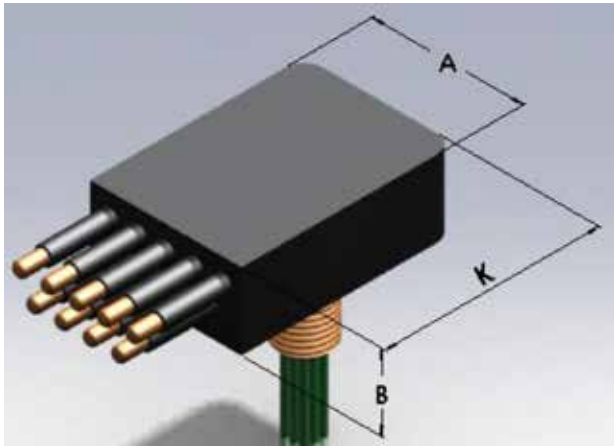


MCLPIL Data Table		
Number of contacts	7	9
Dim. A [mm]	25	25
Dim. B [mm]	14	14
Dim. C [mm]	12.5	12.5
Dim. L [mm]	36.5	36.5
Dim. Q [mm]	43	43
Cable OD [mm]	8.5	10
Cable current [A]	7	7



# MINI CONNECTOR (MC)

## 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

MC Specifications			
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 <sup>2</sup> ) 16/30 stranding 5-16 contacts: 60cm AWG20 (0.5 mm <sup>2</sup> ) 26/34 stranding
		BH leads	2-4 contacts: 30cm, AWG 18 Teflon, (0.97 mm <sup>2</sup> ) 19/30 stranding 5-16 contacts: 30cm, AWG20 Teflon (0.6 mm <sup>2</sup> ) 19/32 stranding

# MINI CONNECTOR (MC) DATA

Contact Layout - MC					
Number of contacts	2	3	4	5	6
Contact layout (Female)					
Number of contacts	8	9	12	16	
Contact layout (Female)					
Contact Layout – MCLP					
Number of contacts	7	9			
Contact layout (Female)					

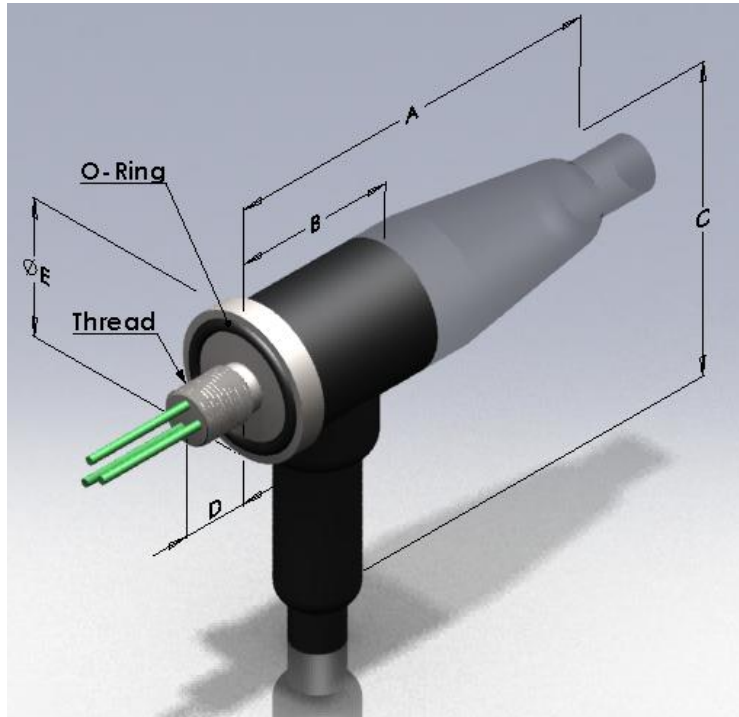
## How to order

1	2	3	4
MC	IL	2	F
Series	Type	Contact Configuration	Description
Mini Connector	Inline (IL)	2-6	F (Female Socket)
	Bulkhead (BH)	7	M (Male Plug)
	Low Profile Inline (LPIL)	8	
	Low Profile Bulkhead (LPBH)	9	
		12	
		16	

Note: LP Only available in 7 & 9 contact configurations

Example: MS-BCR-1502-F denotes; Metal Shell, Bulkhead connector receptacle, shell size 15,2 contacts, female

# 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
Thread	1/2-20 UNF-2A	3/4-16 UNF-2A

# PN DATA

PN Specifications			
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 <sup>2</sup> ) 16/30 stranding AWG 20, AWG 16 also available upon request
Contacts	<0.01 ohm		
Temperature	-8C - +70C		
Depth	>700 bar		

PN Cable Diameters And Currents							
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						

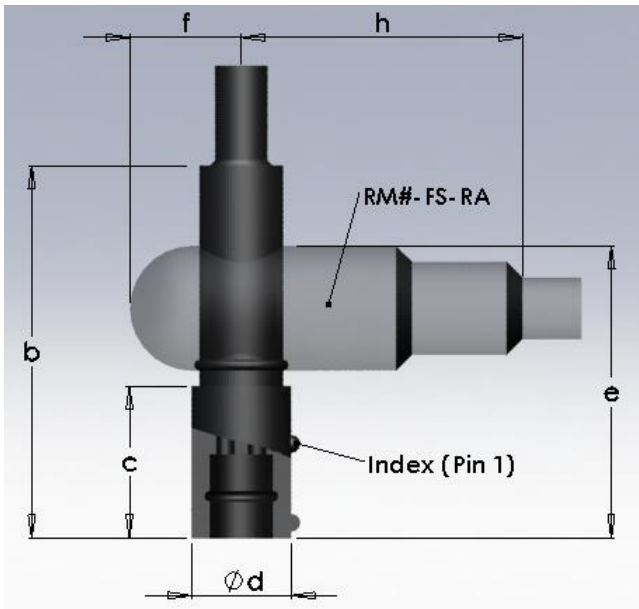
## How to order

1	2	3	4
Penetrator	B	2	RA
Series	Shell Size	# of Conductors	Right Angle
PN (Penetrator)	B	2-8	RA
	C		

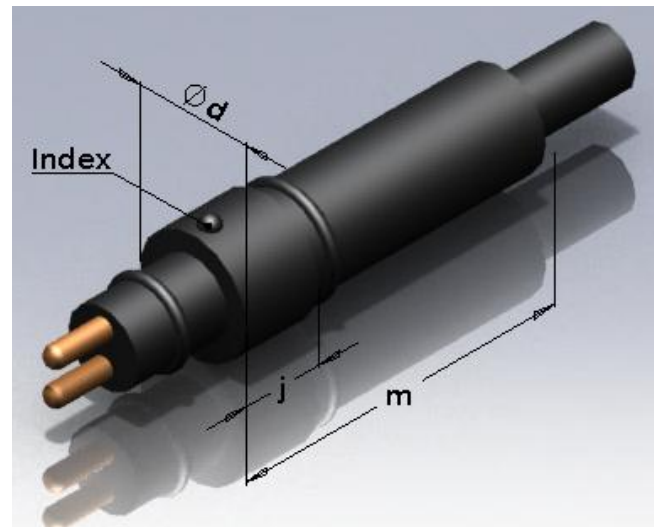
Example: PN-B2-RA denotes: Penetrator, shell size B, 2 contacts, Right Angle

# RUBBER MOLDED (RM)

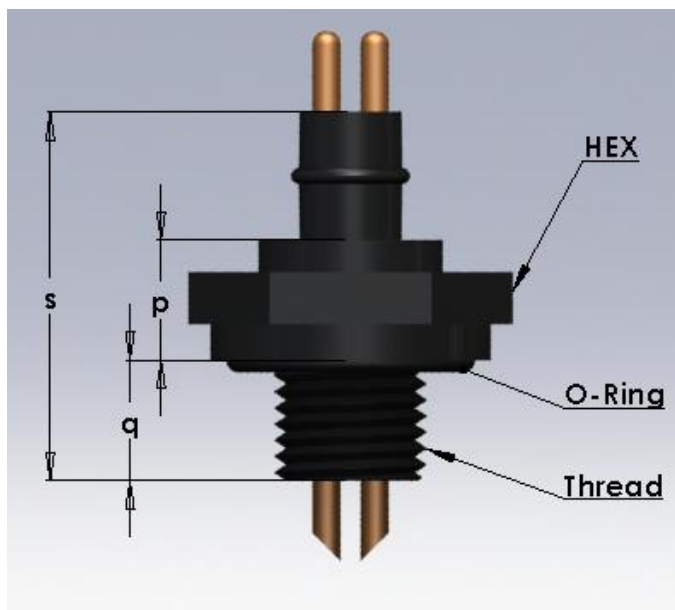
## RM #-FS



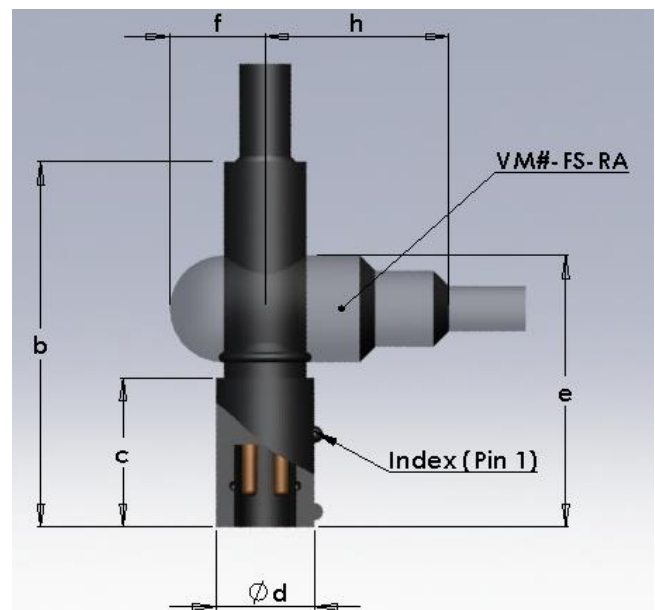
## RM#-MP



## XS#-BCL



## VM#-FS

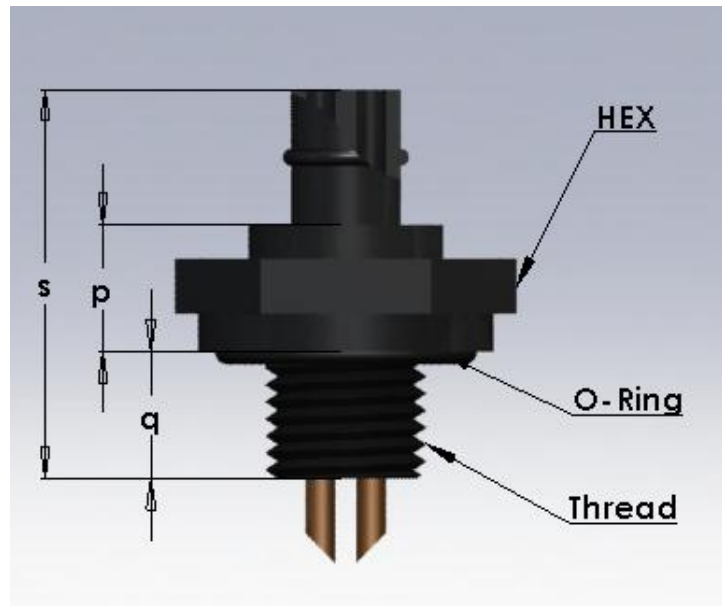


# RUBBER MOLDED (RM)

VM#-MP



















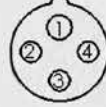
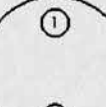





VS#BCL



## RM DATA

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
Thread	5/16-24 UNF-2	3/4-16 UNF-2	1-14 NS-2A

# RM DATA

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

# RM DATA

RM Specifications			
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 <sup>2</sup> ) 16/30 stranding

## How to order

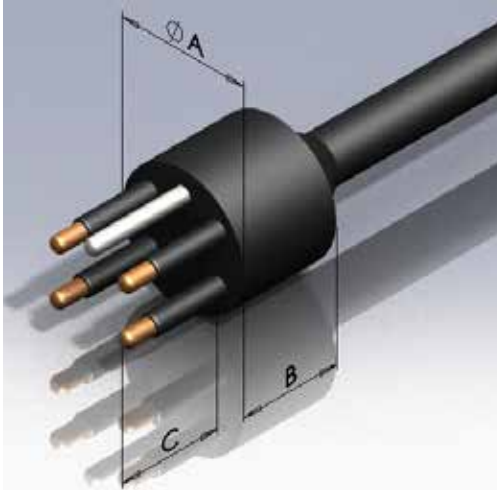
1	2	3	4	
RM	A	1	FS	
Series	Shell Size	Contact Configuration	Description	Locking Sleeve
		1 (Shell size A only)	BCL (Bulkhead)	FLS-A (Shell size A only)
RM (Rubber Molded)	A (only 1 contact)	2	FS (Female Socket)	FLS-G (Shell size G only)
VM (Inverted Rubber Molded)	G (2-6 contacts)		MP (Male Plug)	FLS-K (Shell size K only)
	K (2-8 contacts)	3		
		4		
		5		
		6		
		8 (Shell size K only)		

Example: RMA-1-FS denotes: Rubber Molded, Shell size A, 1 contact, female socket



# STANDARD CIRCULAR (SC)

## STANDARD CIRCULAR INLINE CONNECTOR (SCIL)

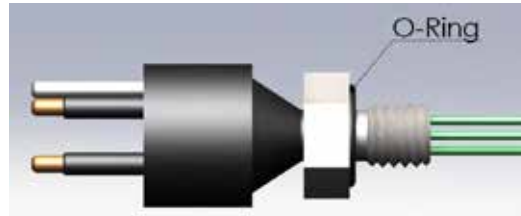
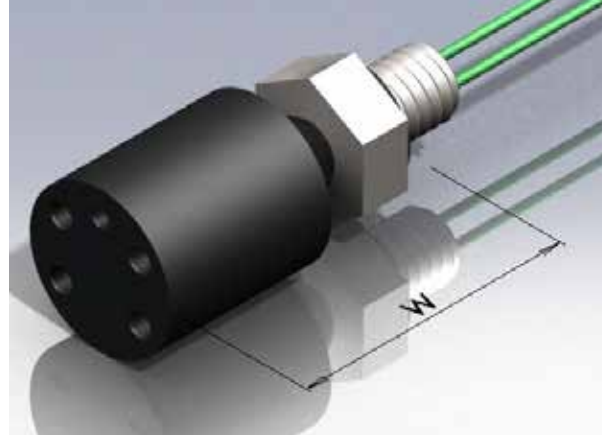
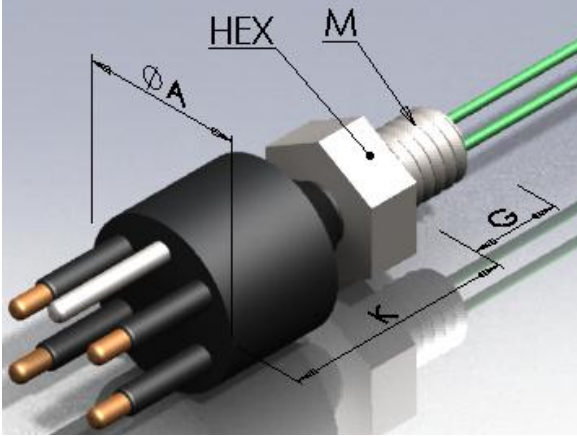


SCIL Data Table

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

# STANDARD CIRCULAR (SC)

## STANDARD CIRCULAR BULKHEAD 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	14 or 19	14 or 19	14 or 19	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
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

# SC DATA

SC Contact Layouts			
Number of contacts	2	3	4
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			

SC Specifications			
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 <sup>2</sup> ) 16/30 stranding
		BH leads	30cm, AWG 18 Teflon, (0.97mm <sup>2</sup> ) 19/30 stranding

How to order			
1	2	3	4
SC	IL	2	F
Series	Model Type	Contact Configuration	Description
SC (Standard Circular)		2-6	F (Female Socket)
	IL (Inline)		
	BH (Bulkhead)	8	M (Male Plug)
		10	
		12	
		16	

Example: SC-IL-2-F denotes; Standard circular, inline connector with 2 contacts, female socket

## Kintec-Type Connectors

Amphenol's Kintec-style connectors (KTK's) offer high temperature and high pressure sealed industry-standard connections.

### Features include:

- Fully compatible with other industry-standard products
- Ranging from 2 to 17pins
- High pressure: 20KPsi; bi-directional
- Medium and High Temperature versions: 170°C and 200°C
- Gold-plated contacts designed for longer life and mating cycles
- Machine molded and machined glass-filled epoxy
- Solder pot connections
- Cable assemblies and pigtails available



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## Downhole Rotatable Connectors

Fully compatible with existing housings, mountings, and main products on the market, Amphenol's Downhole Rotatable connectors (DHR's) were designed to reduce failure points and increase reliability.

### Features include:

- Patent-pending single-contact design
- Fully compatible with industry-standard products
- High pressure: 20KPsi; bi-directional
- High temperature: 200°C
- Tabbed connections capable carrying up to 5A per contact



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## Hermetically Sealed Connectors

Amphenol provides hermetic electrical connecting solutions. From traditional glass-to-metal seal to new technologies such as diffusion bonding and laser welding, Amphenol produces high-performance hermetic assemblies for various downhole applications.

### Features include:

- High pressure: up to 35KPsi
- High temperature: up to 300°C
- Ceramic dielectric material
- Gold-plated Inconel or BeCu pins
- Customized products



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