



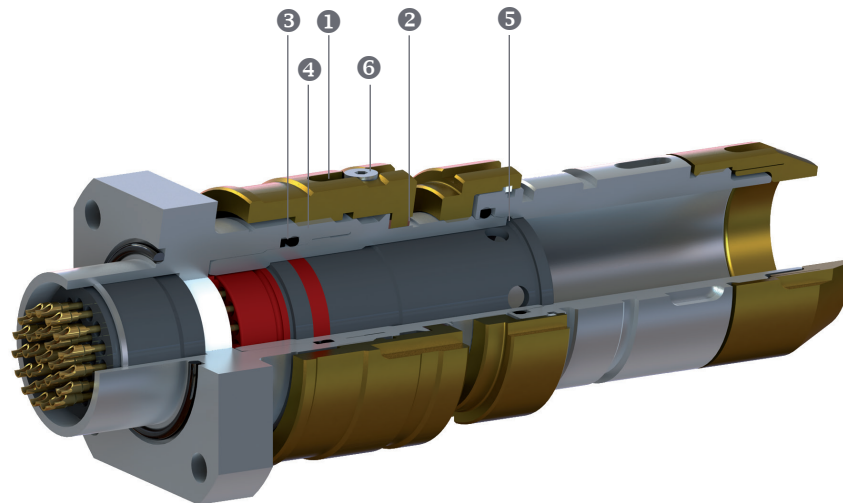
**DEUTSCH**  
**9316 SERIES**  
**CONNECTORS**  
FOR OFFSHORE APPLICATIONS

Harsh Environment, Explosion-Proof, Underwater  
Connectors for Rugged Reliability and Safety

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Designed to help withstand severe environments in marine and offshore applications to depths of up to 7500 meters, the 9316 connector series was designed for easy handling and rugged application in challenging environments.



- ① Coupling ring to be tightened with a spanner
- ② Anti-friction washer allowing constant coupling torque
- ③ Plug/Receptacle sealing granted by o'ring and anti-extrusion gasket
- ④ Shell keying system
- ⑤ Anti-rotation system with teeth at the rear of the plug, allowing a secure tightening and clamping of the accessories
- ⑥ Rotation blocking screws after mating

# DEUTSCH 9316 SERIES

Underwater applications, explosion proof, hermetically sealed

## DEEPWATER CAPABLE

- 7500 meter depths

## WITHSTAND RUGGED CONDITIONS

- Mechanical stresses
- Polluted environments
- Hazardous areas requiring explosion-proof devices

## SURVIVABILITY IN HARSH ENVIRONMENTS

- Stainless steel shells
- Glass-to-metal sealing
- FKM/NBR or fluid resistant o-rings

## EASY TO USE

- Scoop proof interface for reliable mating
- Keying to ensure proper circuit connections

## RANGE OF CONTACTS FOR:

- Signal and control
- High frequency
- Medium and high power

## APPLICATION-MATCHED VERSIONS

- Topside
- Subsea
- Explosion proof (topside and subsea)
- Hermetic

## TYPICAL APPLICATIONS

- Underwater control systems
- Wellheads
- Submarines
- Offshore platforms and loading buoys
- Subsea motors and compressors

## Specifications

### Materials

**Shell:** Stainless steel AISI 316L passivated

**Coupling Ring:** Marine bronze UA9 NFE-C 321

**Insert (Plug/In-Line Receptacle):** Thermosetting resin, silicone elastomer

Meets requirements of MIL-H-5606

**Insert (Hermetic Receptacle):** Glass

### Hermeticity

**Individual Helium Test:** Leakage less than  $1.10^{-6}$  atm.cm<sup>3</sup>/s at 1 bar differential pressure

### Temperature Range

**Standard Connectors:** -55°C to +125°C

**Explosion-Proof Connectors:** -20°C to +100°C\*

**High-Temperature Explosion-Proof Connectors:** -20°C to +190°C\*

\*The in-service temperature of the connector shall not exceed this value to guarantee the explosion-proof properties. 9316 connectors are suitable for use in T6, T5, T4 or T3 areas, depending on ambient temperature and current rating.

### Mechanical

**Durability:** 500 mating cycles

### Pressure

**Hermetic Receptacles:** 150 bars (2715 psi) - hermetic receptacles only

**Subsea Connectors:** 750 bars (10,875 psi) (Contact us for versions size 07 to 19)

### Electrical

**Dielectric Withstanding Voltage (At Sea Level)**

**Service 1:** 1500 VAC (Test Voltage)

**Service 2:** 2300 VAC (Test Voltage)

**Power:** see page 8

**Insulation Resistance:** 5000 MΩ min.at 25°C and 65% relative humidity

### ATEX-Certified Explosion-Proof Connectors

Meet IEC 60079-0 (2009) and IEC 60079-1 (2007)

**LCIE Certificate:** No. LCIE 08 ATEX 0010U

**LCIE Notification:** No. LCIE 08 ATEX 0010U/01 & 0010U/02 & 0010U/03

**Protection Mode:** Explosion-proof envelope "d" of IEC 60079-1 (2007)

**Environment:** Gas (G)

**Gas Group:** Group II B Gb

### Contacts

**Plug/In-Line Receptacle Contact**

**Crimp type:** 20, 16, 12 AWG and coax

Rear insertion and front extraction

**Crimp and Solder Type:** Size 8

**Crimp, Solder or Terminal Type:** Size 4, 0, 150 mm<sup>2</sup>, 300 mm<sup>2</sup>

**Hermetic Receptacle Contact**

**Solder or Terminal:** Iron nickel (or copper, mode A810 for sizes 0, 150 mm<sup>2</sup>), plated gold over nickel,

### Current Rating per Contact (max.)

**Size 20:** 5 A      **Size 4:** 60/100 A

**Size 16:** 10 A      **Size 0:** 120/200 A

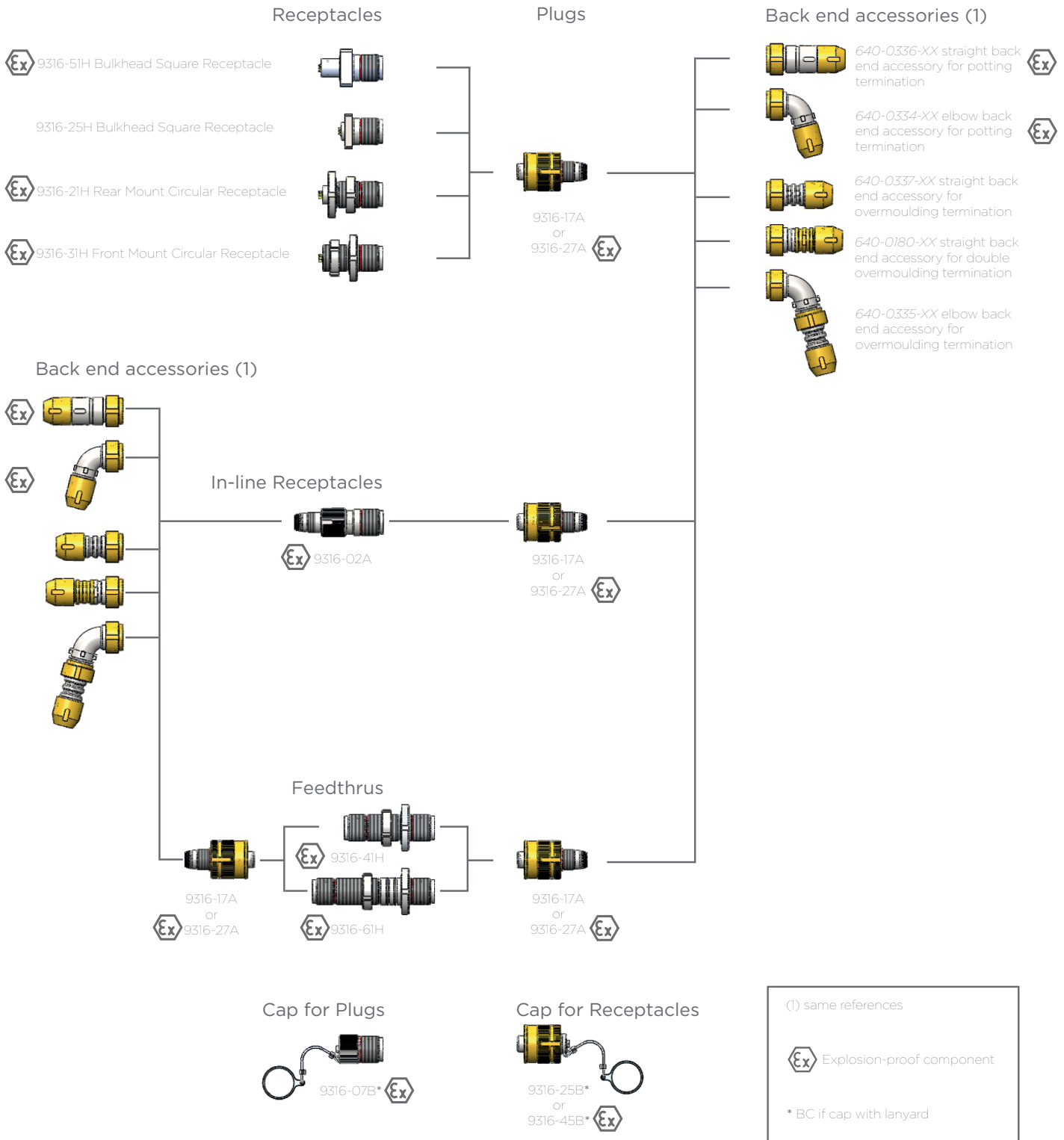
**Size 12:** 17 A      **150 mm<sup>2</sup>:** 400 A

**Size 8:** 33 A      **300 mm<sup>2</sup>:** 600 A

## TE Components ...TE Technology ...TE Know-how ...

AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Raychem | Rochester | DEUTSCH  
L.L. Rowe | Phoenix Optix | SEACON

Get your product to market faster with a smarter, better solution.



PART NUMBERING SYSTEM

**93 16 - 27 A 19 - 12 P N \* \*\*\*\*\***

**Product Range**

**Shell Types**

- 02** In Line Receptacle Ex d (Ex)
- 17** Plug
- 21** Rear Mount Circular Receptacle Ex d (Ex)
- 25** Square Flange Receptacle
- 27** Plug Ex d (Ex)
- 31** Front Mount Circular Receptacle Ex d (Ex)
- 41** Feedthru Ex d (Ex)
- 51** Square Flange Receptacle Ex d (Ex)
- 61** Feedthru Ex d (Ex)

**Sealed Version**

- A** 02, 17, 27, 51\*

**Hermetic Version**

- H** 21, 25, 31, 41, 51, 61  
Other Hermetic Versions Available on Request

**Shell Size**

- 07, 12, 19** 750 bars (10,875 psi)
- 27, 37, 61, 121** 150 bars (2175 psi)

**Arrangements**

See Pages 7 and 8

**Contact Types**

- P** Pin Contact (for 21H, 31H, 51H, 71H, 02A)
- S** Socket Contact (for 17A, 27A)
- PP** Pin Contact Each Side (for 41H, 61H)

**Keyway**

- N** Normal
- T, U, V, W, X, Y, Z** Special Position

**Suffix for Contact** (For Arrangements with Size 8 Contacts Only (19-93, 37-19, 61-21))

- 8** Power Contacts
- \*** Coax Contacts (Contact TE)
- 87** Specific Crimped Contacts
- 090** Without Contacts (For all Arrangements)

**Modification Number**

- 1A** Without Accessory (Types 02, 17, 27)
- A108** Plug Inserts Mirror Marking (Mandatory for Hermetic Feedthru)
- A810** Hermetic Receptacle, Copper Contact, Availability See Page 10
- A5743** 1A + A108
- 563** Fluoroelastomer Seal
- 563-A338** Fluoroelastomer Seal and Potting Resin for Receptacles 51H & 25H
- HT** High Temperature

\* Arrangements 121-901 & 121-905 are available only in 02A, 17A, 27A (sealed version)

ARRANGEMENTS

Front view of male insert receptacle or female insert plug - wiring side view

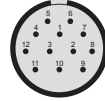
**07-0** 7 contacts **20 AWG**  
Service Voltage : 250 VAC



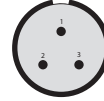
**07-93** 3 contacts **16 AWG**  
Service Voltage : 650 VAC



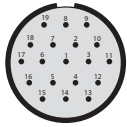
**12-0** 12 contacts **20 AWG**  
Service Voltage : 250 VAC



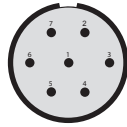
**12-93** 3 contacts **12 AWG**  
Or Optical  
Service Voltage : 650 VAC



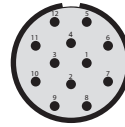
**19-0** 19 contacts **20 AWG**  
Service Voltage : 250 VAC



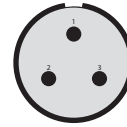
**19-7** 7 contacts **12 AWG**  
Service Voltage : 650 VAC



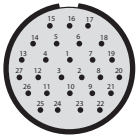
**19-12** 12 contacts **16 AWG**  
Service Voltage : 250 VAC



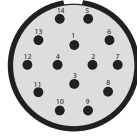
**19-93** 3 contacts **8 AWG**  
Or Coax  
Service Voltage : 650 VAC



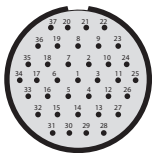
**27-0** 27 contacts **20 AWG**  
Service Voltage : 250 VAC



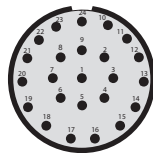
**27-2** 14 contacts **16 AWG**  
Service Voltage : 650 VAC



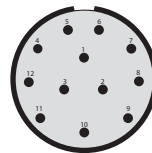
**37-0** 37 contacts **20 AWG**  
Service Voltage : 250 VAC



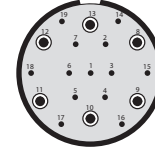
**37-2** 24 contacts **16 AWG**  
Service Voltage : 250 VAC



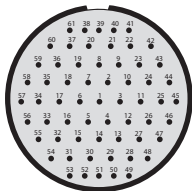
**37-3** 12 contacts **12 AWG**  
Or Optical  
Service Voltage : 250 VAC



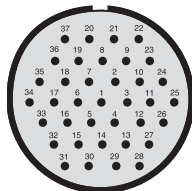
**37-19** 13 contacts **20 AWG**  
+ 6 contacts **8 AWG**  
Or Coax  
Service Voltage : 250 VAC



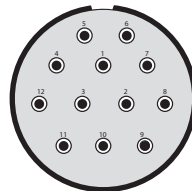
**61-0** 61 contacts **20 AWG**  
Service Voltage : 250 VAC



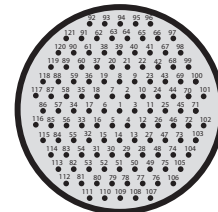
**61-14** 37 contacts **16 AWG**  
Service Voltage : 250 VAC



**61-21** 12 contacts **8 AWG**  
Or Coax  
Service Voltage : 250 VAC



**121-0** 121 contacts **20 AWG**  
Service Voltage : 250 VAC

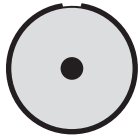


**AWG 8** : Power or Coax Contacts  
**AWG 12** : Electrical or Optical Contacts

ARRANGEMENTS

Front view of male insert receptacle or female insert plug - wiring side view

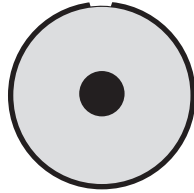
**27-901** 1 contact **0 AWG**



Version	Test Voltage	Service Voltage
A Sealed	3500 VRMS	1250 VAC 200 A
H Hermetic	3500 VRMS	1250 VAC 120 A
H... A810 Hermetic	2500 VRMS	750 VAC 200 A

Modification A810 (Hermetic, copper contact) available

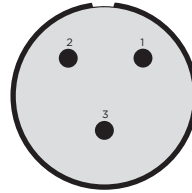
**61-901** 1 x 150 mm<sup>2</sup>



Version	Test Voltage	Service Voltage
A Sealed	5000 VRMS	2000 VAC 400 A
H Hermetic	Not available	
H... A810 Hermetic	5000 VRMS	2000 VAC 400 A

Modification A810 (Hermetic, copper contact) only available

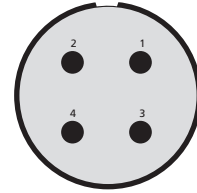
**61-903** 3 contacts **4 AWG**



Version	Test Voltage	Service Voltage
A Sealed	3500 VRMS	1250 VAC 100 A
H Hermetic	3500 VRMS	1250 VAC 60 A
H... A810 Hermetic	2500 VRMS	750 VAC 100 A

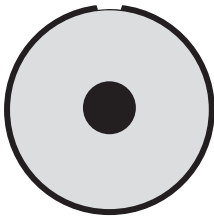
Modification A810 (Hermetic, copper contact) available

**61-904** 4 contacts **4 AWG**



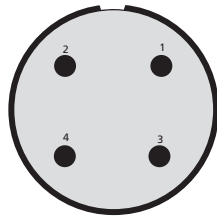
Version	Test Voltage	Service Voltage
A Sealed	3500 VRMS	1250 VAC 100 A
H Hermetic	3500 VRMS	1250 VAC 60 A
H... A810 Hermetic	Not available	

**121-901** 1 x 300 mm<sup>2</sup>



Version	Test Voltage	Service Voltage
A Sealed	5000 VRMS	2000 VAC 600 A
H Hermetic	Not available	
H... A810 Hermetic	Not available	

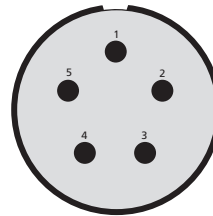
**121-904** 4 contacts **0 AWG**



Version	Test Voltage	Service Voltage
A Sealed	3500 VRMS	1250 VAC 200 A
H Hermetic	Not available	
H... A810 Hermetic	2500 VRMS	750 VAC 200 A

Modification A810 (Hermetic, copper contact) available

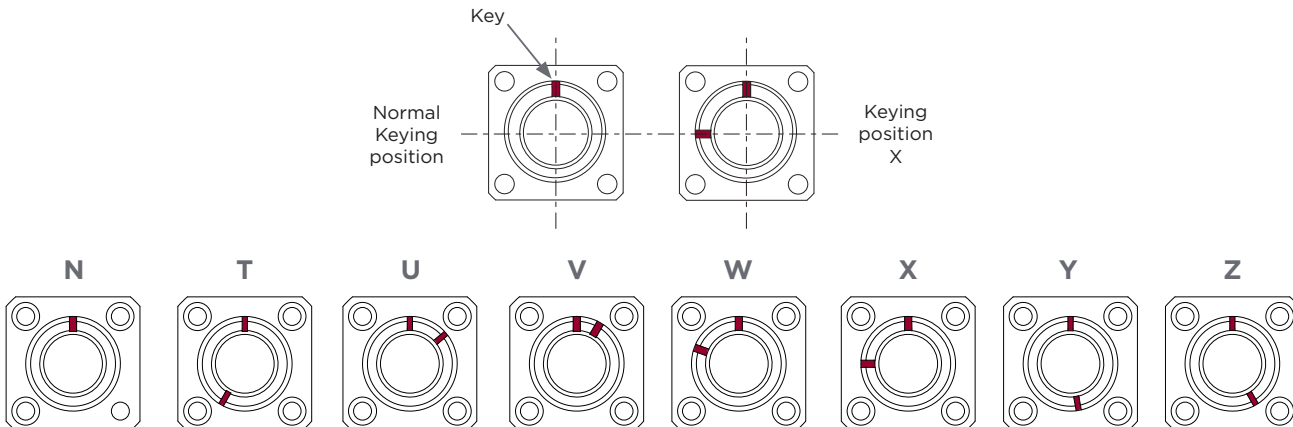
**121-905** 5 contacts **4 AWG**



Version	Test Voltage	Service Voltage
A Sealed	3000 VRMS	1000 VAC 100 A
H Hermetic	Not available	
H... A810 Hermetic	Not available	

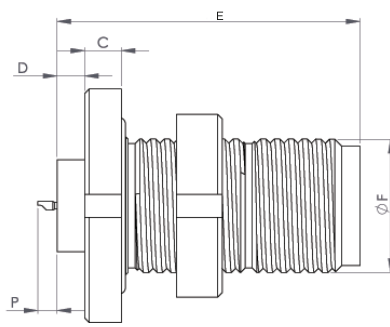
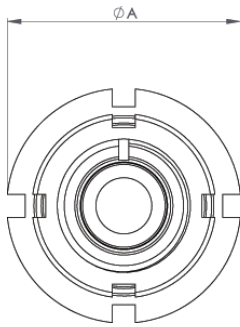
Hermetic receptacles not available

Keying System - Receptacle Front View



HERMETIC RECEPTACLES

Rear Mount Circular Receptacle - 21H



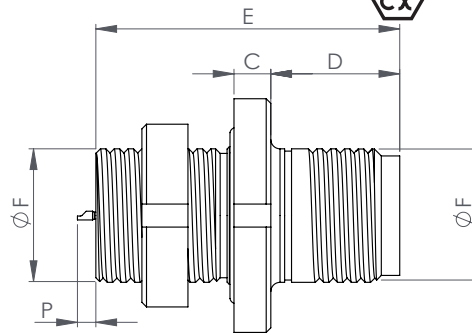
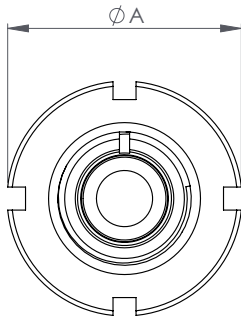
Part Number	ØA max.	C max.	D max.	E max.	ØF
9316-21H 07-***P*	51 (2.007)	8.1 (0.318)	6.3 (0.248)	66.1 (2.602)	29 (1.142)
9316-21H 12-***P*	52 (2.047)	8.1 (0.318)	6.3 (0.248)	66.1 (2.602)	31 (1.220)
9316-21H 19-***P*	55 (2.165)	8.1 (0.318)	6.3 (0.248)	66.1 (2.602)	34 (1.338)
9316-21H 27-***P*	69 (2.716)	8.1 (0.318)	6.3 (0.248)	66.1 (2.602)	41 (1.614)
9316-21H 37-***P*	74 (2.913)	8.1 (0.318)	6.3 (0.248)	66.1 (2.602)	46 (1.811)
9316-21H 61-***P*	80 (3.149)	8.1 (0.318)	6.3 (0.248)	66.1 (2.602)	53 (2.086)
9316-21H 121-***P*	Consult us				

P (Contact over passing)	
AWG 20	4.20 (0.165)
AWG 16	6.23 (0.245)
AWG 12	6.48 (0.255)
AWG 8	9.50 (0.374)
Coax	Contact us
Power Contacts	Contact us

mm / (inch)

mm / (inch)

Front Mount Circular Receptacle - 31H



Part Number	ØA max.	C max.	D max.	E max.	ØF
9316-31H 07-***P*	51 (2.007)	8.10 (0.318)	28.10 (1.106)	66.10 (2.602)	29 (1.142)
9316-31H 12-***P*	52 (2.047)	8.10 (0.318)	28.10 (1.106)	66.10 (2.602)	31 (1.220)
9316-31H 19-***P*	55 (2.165)	8.10 (0.318)	28.10 (1.106)	66.10 (2.602)	34 (1.338)
9316-31H 27-***P*	69 (2.716)	8.10 (0.318)	28.10 (1.106)	66.10 (2.602)	41 (1.614)
9316-31H 37-***P*	74 (2.913)	8.10 (0.318)	28.10 (1.106)	66.10 (2.602)	46 (1.811)
9316-31H 61-***P*	80 (3.149)	8.10 (0.318)	28.10 (1.106)	66.10 (2.602)	53 (2.086)
9316-31H 121-***P*	95 (3.740)	10.10 (0.397)	41.10 (1.618)	81.10 (3.192)	67 (2.637)

P (Contact over passing)	
AWG 20	4.20 (0.165)
AWG 16	6.23 (0.245)
AWG 12	6.48 (0.255)
AWG 8	9.50 (0.374)
Coax	Contact us
Power Contacts	Contact us

mm / (inch)

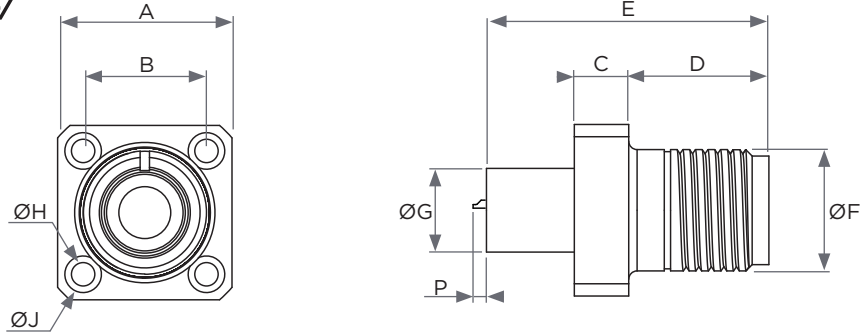
mm / (inch)



# DEUTSCH 9316 Series

## HERMETIC RECEPTACLES

### Square Flange - 51H



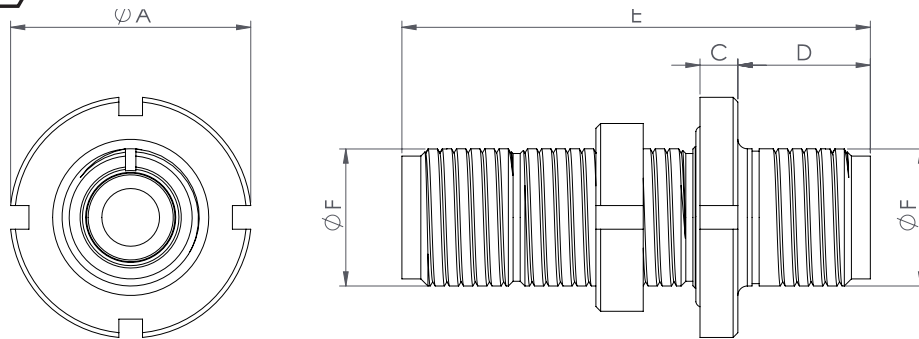
Part Number	A max.	B	C max.	D max.	E max.	ØF	ØG max.	ØH max.	ØJ max.
9316-51H 07-***P*	41.50 (1.633)	29 (1.141)	13.10 (0.515)	33.60 (1.322)	67.70 (2.665)	29 (1.142)	20 (0.787)	5.60 (0.220)	8.60 (0.338)
9316-51H 12-***P*	42.50 (1.673)	30 (1.181)	13.10 (0.515)	33.60 (1.322)	67.70 (2.665)	31 (1.220)	23 (0.905)	5.60 (0.220)	8.60 (0.338)
9316-51H 19-***P*	44.50 (1.751)	32 (1.259)	13.10 (0.515)	33.60 (1.322)	67.70 (2.665)	34 (1.338)	26 (1.024)	5.60 (0.220)	8.60 (0.338)
9316-51H 27-***P*	56.50 (2.224)	40 (1.574)	13.10 (0.515)	33.60 (1.322)	67.70 (2.665)	41 (1.614)	30 (1.181)	6.60 (0.220)	10.60 (0.417)
9316-51H 37-***P*	60.50 (2.381)	44 (1.732)	13.10 (0.515)	33.60 (1.322)	67.70 (2.665)	46 (1.811)	34.5 (1.358)	6.60 (0.220)	10.60 (0.417)
9316-51H 61-***P*	65.50 (2.578)	49 (1.929)	13.10 (0.515)	33.60 (1.322)	67.70 (2.665)	53 (2.086)	43.5 (1.712)	6.60 (0.220)	10.60 (0.417)
9316-51H 121-***P*	73.50 (2.893)	60 (2.362)	13.10 (0.515)	48.60 (1.913)	82.60 (3.251)	67 (2.637)	55 (2.165)	6.60 (0.259)	10.60 (0.417)

P (Contact over passing)	
AWG 20	2.70 (0.106)
AWG 16	4.73 (0.186)
AWG 12	4.98 (0.196)
AWG 8	8.00 (0.315)
Coax	Contact us
Power Contacts	Contact us

mm / (inch)

mm / (inch)

### Feedthru - 41H

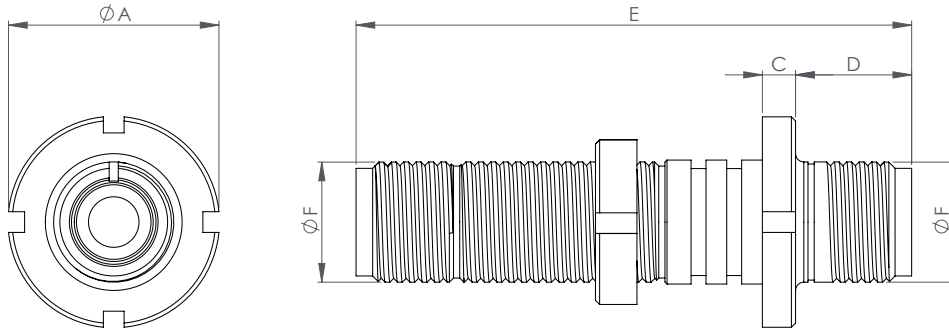


Part Number	ØA max.	C max.	D max.	E max.	ØF
9316-41H 07-***P*	51 (2.007)	8.1 (0.318)	28.1 (1.106)	99 (3.897)	29 (1.142)
9316-41H 12-***P*	52 (2.047)	8.1 (0.318)	28.1 (1.106)	99 (3.897)	31 (1.220)
9316-41H 19-***P*	55 (2.165)	8.1 (0.318)	28.1 (1.106)	99 (3.897)	34 (1.338)
9316-41H 27-***P*	69 (2.716)	8.1 (0.318)	28.1 (1.106)	99 (3.897)	41 (1.614)
9316-41H 37-***P*	74 (2.913)	8.1 (0.318)	28.1 (1.106)	99 (3.897)	46 (1.811)
9316-41H 61-***P*	80 (3.149)	8.1 (0.318)	28.1 (1.106)	99 (3.897)	53 (2.086)
9316-41H 121-***P*	Consult us				

mm / (inch)

HERMETIC RECEPTACLES

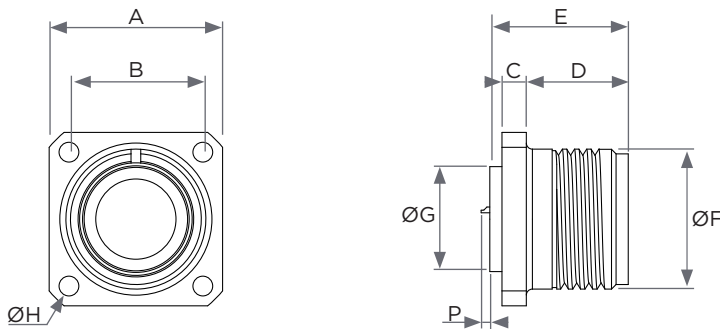
Feedthru - 61H 



Part Number	ØA max.	C max.	D max.	E max.	ØF
9316-61H 07- <b>pp*</b>	51 (2.007)	8.10 (0.318)	28.10 (1.106)	134 (5.275)	29 (1.142)
9316-61H 12- <b>pp*</b>	52 (2.047)	8.10 (0.318)	28.10 (1.106)	134 (5.275)	31 (1.220)
9316-61H 19- <b>pp*</b>	55 (2.165)	8.10 (0.318)	28.10 (1.106)	134 (5.275)	34 (1.338)
9316-61H 27- <b>pp*</b>	69 (2.716)	8.10 (0.318)	28.10 (1.106)	134 (5.275)	41 (1.614)
9316-61H 37- <b>pp*</b>	74 (2.913)	8.10 (0.318)	28.10 (1.106)	134 (5.275)	46 (1.811)
9316-61H 61- <b>pp*</b>	80 (3.149)	8.10 (0.318)	28.10 (1.106)	134 (5.275)	53 (2.086)
9316-61H 121- <b>pp*</b>	95 (3.740)	10.10 (0.397)	41.10 (1.618)	134 (5.275)	67 (2.637)

mm / (inch)

Square Flange - 25H



Part Number	A max.	B	C max.	D max.	E max.	ØF	ØG max.	Ø H
9316-25H 07- <b>pp*</b>	38.50 (1.515)	29 (1.141)	8.10 (0.319)	33.60 (1.324)	45.60 (1.795)	29 (1.142)	20 (0.787)	5.50 (0.216)
9316-25H 12- <b>pp*</b>	39.50 (1.555)	30 (1.181)	8.10 (0.319)	33.60 (1.324)	45.60 (1.795)	31 (1.220)	23 (0.905)	5.50 (0.216)
9316-25H 19- <b>pp*</b>	41.50 (1.633)	32 (1.259)	8.10 (0.319)	33.60 (1.324)	45.60 (1.795)	34 (1.338)	26 (1.024)	5.50 (0.216)
9316-25H 27- <b>pp*</b>	53.50 (2.106)	40 (1.574)	8.10 (0.319)	33.60 (1.324)	45.60 (1.795)	41 (1.614)	30 (1.181)	6.50 (0.256)
9316-25H 37- <b>pp*</b>	57.50 (2.264)	44 (1.732)	8.10 (0.319)	33.60 (1.324)	45.60 (1.795)	46 (1.811)	34.5 (1.358)	6.50 (0.256)
9316-25H 61- <b>pp*</b>	62.50 (2.460)	49 (1.929)	8.10 (0.319)	33.60 (1.324)	45.60 (1.795)	53 (2.086)	43.5 (1.712)	6.50 (0.256)
9316-25H 121- <b>pp*</b>	73.50 (2.895)	60 (2.362)	10.10 (0.398)	48.60 (1.913)	62.60 (2.464)	67 (2.637)	55 (2.165)	6.50 (0.256)

mm / (inch)

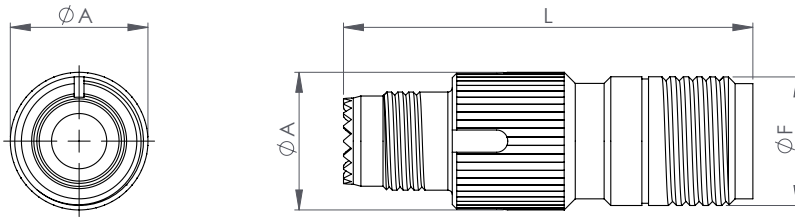
P (Contact over passing)

AWG 20	2.85 (0.112)
AWG 16	4.83 (0.190)
AWG 12	3.68 (0.145)
AWG 8	8.50 (0.335)
Coax	Contact us
Power Contacts	Contact us

mm / (inch)

IN LINE RECEPTACLES / PLUGS

In line receptacle - 02A 

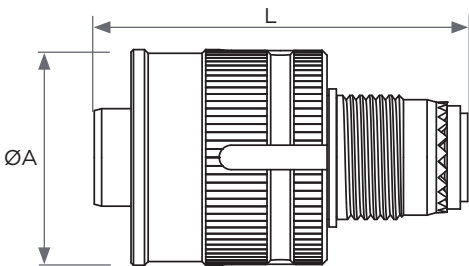


Part Number	ØA max.	L max.	ØF
9316-02 A 07-***P* 1A	31.20 (1.228)	92.50 (3.641)	29 (1.142)
9316-02 A 12-***P* 1A	33.20 (1.307)	92.50 (3.641)	31 (1.220)
9316-02 A 19-***P* 1A	36.20 (1.425)	92.50 (3.641)	34 (1.338)
9316-02 A 27-***P* 1A	43.20 (1.700)	92.50 (3.641)	41 (1.614)
9316-02 A 37-***P* 1A	48.20 (1.897)	92.50 (3.641)	46 (1.811)
9316-02 A 61-***P* 1A	55.20 (2.173)	92.50 (3.641)	53 (2.086)
9316-02 A 121-***P* 1A	69.20 (2.724)	122.50 (4.822)	67 (2.638)

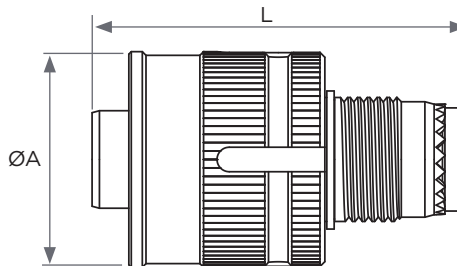
mm / (inch)

Plugs - 17A - 27A 

17A STANDARD



27A EXPLOSION-PROOF 

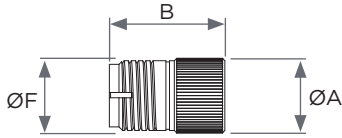


Part Number	ØA max.	L max.
9316-** A 07-***S* 1A	42.20 (1.661)	72.20 (2.842)
9316-** A 12-***S* 1A	44.20 (1.740)	72.20 (2.842)
9316-** A 19-***S* 1A	47.20 (1.858)	72.20 (2.842)
9316-** A 27-***S* 1A	54.20 (2.134)	72.20 (2.842)
9316-** A 37-***S* 1A	59.20 (2.330)	72.20 (2.842)
9316-** A 61-***S* 1A	66.20 (2.606)	72.20 (2.842)
9316-** A 121-***S* 1A	80.20 (3.157)	87.20 (3.433)

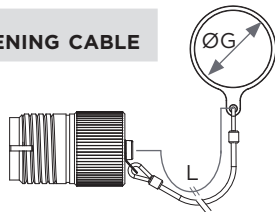
PROTECTION CAPS

Cap for Plug - Types 07B - 07BC 

**07B** WITHOUT FASTENING CABLE



**07BC** WITH FASTENING CABLE

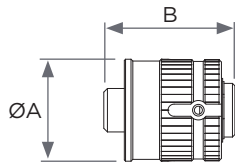


Part Number	ØA max.	B max.	ØF min.	ØG min.	L max.
<b>9316-07 * 07</b>	31.20 (1.228)	48.20 (1.897)	29 (1.141)	22.50 (0.885)	200 (7.873)
<b>9316-07 * 12</b>	33.20 (1.307)	48.20 (1.897)	31 (1.220)	25.50 (1.003)	200 (7.873)
<b>9316-07 * 19</b>	36.20 (1.425)	48.20 (1.897)	34 (1.338)	28.90 (1.137)	200 (7.873)
<b>9316-07 * 27</b>	43.20 (1.700)	48.20 (1.897)	41 (1.614)	33.70 (1.326)	200 (7.873)
<b>9316-07 * 37</b>	48.20 (1.897)	48.20 (1.897)	46 (1.811)	36.80 (1.448)	200 (7.873)
<b>9316-07 * 61</b>	55.20 (2.173)	48.20 (1.897)	53 (2.086)	44.50 (1.751)	200 (7.873)
<b>9316-07 * 121</b>	69.20 (2.722)	63.20 (2.488)	67 (2.637)	58.10 (2.287)	200 (7.873)

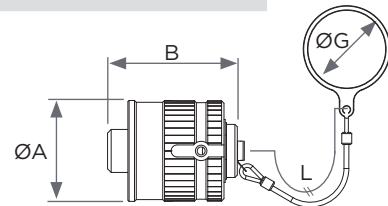
\* B or BC mm / (inch)

Cap for Receptacle - Types 25B - 25BC

**25B** WITHOUT FASTENING CABLE



**25BC** WITH FASTENING CABLE

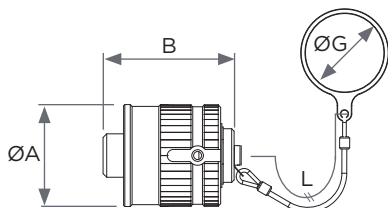


Part Number	ØA max.	B max.	ØG min.	L max.
<b>9316-25 * 07</b>	42.20 (1.661)	54 (2.125)	30.40 (1.196)	200 (7.873)
<b>9316-25 * 12</b>	44.20 (1.740)	54 (2.125)	32.00 (1.259)	200 (7.873)
<b>9316-25 * 19</b>	47.20 (1.858)	54 (2.125)	34.80 (1.370)	200 (7.873)
<b>9316-25 * 27</b>	54.20 (2.133)	54 (2.125)	41.60 (1.637)	200 (7.873)
<b>9316-25 * 37</b>	59.20 (2.330)	54 (2.125)	47.80 (1.881)	200 (7.873)
<b>9316-25 * 61</b>	66.20 (2.606)	54 (2.125)	55.40 (2.181)	200 (7.873)
<b>9316-25 * 121</b>	80.20 (3.157)	69 (2.716)	71.20 (2.803)	200 (7.873)

\* B or BC mm / (inch)

Explosion-Proof Cap for Receptacle - Type 45BC 

**45BC** WITH FASTENING CABLE

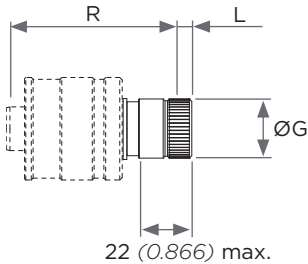


Part Number	ØA max.	B max.	ØG min.	L max.
<b>9316-45 BC 07</b>	42.20 (1.661)	54 (2.125)	30.40 (1.196)	200 (7.873)
<b>9316-45 BC 12</b>	44.20 (1.740)	54 (2.125)	32.00 (1.259)	200 (7.873)
<b>9316-45 BC 19</b>	47.20 (1.858)	54 (2.125)	34.80 (1.370)	200 (7.873)
<b>9316-45 BC 27</b>	54.20 (2.133)	54 (2.125)	41.60 (1.637)	200 (7.873)
<b>9316-45 BC 37</b>	59.20 (2.330)	54 (2.125)	47.80 (1.881)	200 (7.873)
<b>9316-45 BC 61</b>	66.20 (2.606)	54 (2.125)	55.40 (2.181)	200 (7.873)
<b>9316-45 BC 121</b>	80.20 (3.157)	69 (2.716)	71.20 (2.803)	200 (7.873)

mm / (inch)

ACCESSORIES FOR AIR &/ OR ATEX APPLICATIONS

Backnut

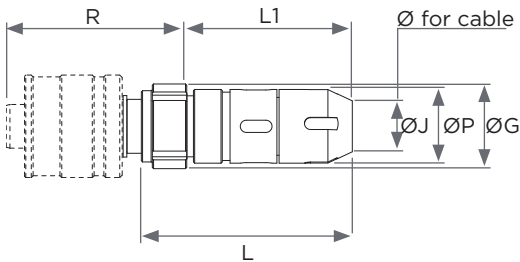


Part Number	ØG max.	L mini.	R max.	Tightening Torque*
<b>087-0004-07</b>	24.50 (0.964)	4.50 (0.177)	72.20 (2.842)	20 Nm
<b>087-0004-12</b>	27.10 (1.066)	4.50 (0.177)	72.20 (2.842)	22 Nm
<b>087-0004-19</b>	30.80 (1.212)	4.50 (0.177)	72.20 (2.842)	25 Nm
<b>087-0004-27</b>	35.55 (1.399)	4.50 (0.177)	72.20 (2.842)	28 Nm
<b>087-0004-37</b>	38.70 (1.523)	4.50 (0.177)	72.20 (2.842)	32 Nm
<b>087-0004-61</b>	45.90 (1.807)	4.50 (0.177)	72.20 (2.842)	37 Nm
<b>087-0004-95</b>	56.90 (2.240)	4.50 (0.177)	87.20 (3.433)	45 Nm

mm / (inch)

\* Valid for all types, all nuts

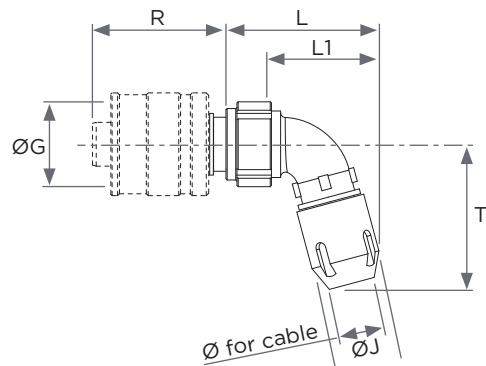
Straight for Braid Termination and Heat-Shrink Boot



Part Number	ØG max.	ØJ max.	L max.	L1 max.	ØP max.	R max.
<b>640-0336-07</b>	34.90 (1.374)	16.45 (0.647)	88.70 (3.492)	70.95 (2.793)	30.45 (1.198)	72.20 (2.842)
<b>640-0336-12</b>	37.80 (1.488)	19.25 (0.757)	88.70 (3.492)	70.95 (2.793)	33.45 (1.316)	72.20 (2.842)
<b>640-0336-19</b>	42.60 (1.677)	22.25 (0.875)	88.70 (3.492)	70.95 (2.793)	36.95 (1.454)	72.20 (2.842)
<b>640-0336-27</b>	45.80 (1.803)	27.75 (1.092)	91.90 (3.618)	73.95 (2.911)	41.85 (1.647)	72.20 (2.842)
<b>640-0336-37</b>	53.80 (2.118)	31.05 (1.222)	91.90 (3.618)	73.95 (2.911)	45.15 (1.777)	72.20 (2.842)
<b>640-0336-61</b>	57.40 (2.259)	38.45 (1.513)	95.00 (3.740)	77.05 (3.033)	53.15 (2.092)	72.20 (2.842)
<b>640-0336-95</b>	69.70 (2.744)	45.30 (1.783)	115.00 (4.527)	96.15 (3.780)	60.60 (2.385)	87.20 (3.433)

mm / (inch)

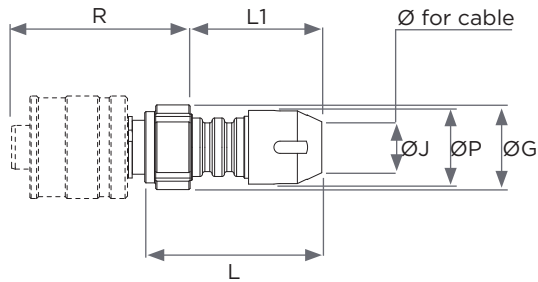
Elbow for Braid Termination and Heat-Shrink Boot



Part Number	ØG max.	ØJ max.	L max.	L1 max.	ØP max.	R max.	T max.
<b>640-0334-07</b>	34.90 (1.374)	15.75 (0.620)	63.50 (2.499)	45.75 (1.801)	28.40 (1.118)	72.20 (2.842)	61.15 (2.407)
<b>640-0334-12</b>	37.80 (1.488)	18.55 (0.730)	66.20 (2.606)	48.45 (1.907)	31.20 (1.228)	72.20 (2.842)	62.20 (2.448)
<b>640-0334-19</b>	42.60 (1.677)	22.35 (0.879)	69.80 (2.748)	52.05 (2.049)	34.30 (1.350)	72.20 (2.842)	65.35 (2.572)
<b>640-0334-27</b>	45.80 (1.803)	24.90 (0.980)	74.80 (2.944)	57.05 (2.246)	38.30 (1.507)	72.20 (2.842)	67.55 (2.659)
<b>640-0334-37</b>	53.80 (2.118)	29.50 (1.161)	78.10 (3.074)	60.35 (2.375)	42.30 (1.665)	72.20 (2.842)	68.00 (2.677)
<b>640-0334-61</b>	57.40 (2.259)	37.40 (1.472)	85.35 (3.360)	67.60 (2.661)	49.40 (1.944)	72.20 (2.842)	72.10 (2.838)

mm / (inch)

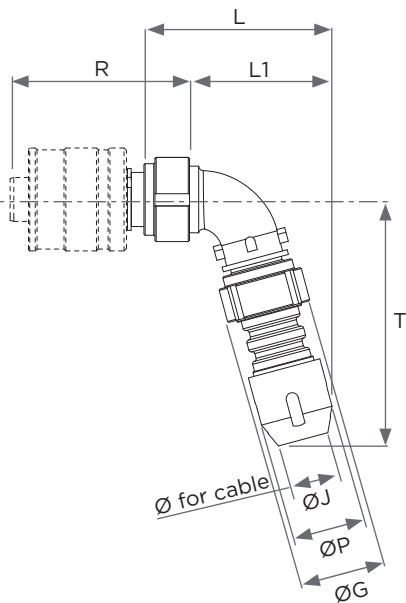
Straight for Braid Termination and Overmoulding



Part Number	ØG max.	ØJ max.	L max.	L1 max.	ØP max.	R max.
<b>640-0337-07</b>	34.90 (1.374)	16.45 (0.647)	72.20 (2.842)	54.25 (2.135)	30.30 (1.192)	72.20 (2.842)
<b>640-0337-12</b>	37.80 (1.488)	19.25 (0.757)	72.20 (2.842)	54.25 (2.135)	33.30 (1.311)	72.20 (2.842)
<b>640-0337-19</b>	42.60 (1.677)	22.25 (0.875)	72.20 (2.842)	54.25 (2.135)	36.30 (1.429)	72.20 (2.842)
<b>640-0337-27</b>	45.80 (1.803)	27.75 (1.092)	72.20 (2.842)	54.25 (2.135)	41.70 (1.641)	72.20 (2.842)
<b>640-0337-37</b>	53.80 (2.118)	31.05 (1.222)	72.20 (2.842)	54.25 (2.135)	45.00 (1.771)	72.20 (2.842)
<b>640-0337-61</b>	57.40 (2.259)	38.45 (1.513)	72.20 (2.842)	54.25 (2.135)	53.00 (2.086)	72.20 (2.842)
<b>640-0337-95</b>	69.70 (2.744)	45.30 (1.783)	86.00 (3.385)	67.00 (2.637)	60.60 (2.385)	87.20 (3.433)

mm / (inch)

Elbow for Braid Termination and Overmoulding



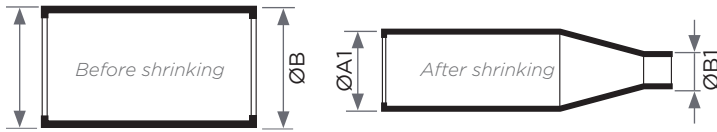
Part Number	ØG max.	ØJ max.	L max.	L1 max.	ØP max.	R max.	T max.
<b>640-0335-07</b>	34.90 (1.374)	16.45 (0.647)	73.45 (2.891)	56.00 (2.204)	30.30 (1.192)	72.20 (2.842)	96.50 (3.799)
<b>640-0335-12</b>	37.80 (1.488)	19.25 (0.757)	76.40 (3.007)	58.95 (2.320)	33.30 (1.311)	72.20 (2.842)	98.05 (3.860)
<b>640-0335-19</b>	42.60 (1.677)	22.25 (0.875)	79.80 (3.141)	62.35 (2.454)	36.30 (1.429)	72.20 (2.842)	99.80 (3.929)
<b>640-0335-27</b>	45.80 (1.803)	27.75 (1.092)	85.45 (3.364)	67.80 (2.669)	41.70 (1.641)	72.20 (2.842)	102.95 (4.053)
<b>640-0335-37</b>	53.80 (2.118)	31.05 (1.222)	88.65 (3.490)	71.00 (2.795)	45.00 (1.771)	72.20 (2.842)	106.60 (4.196)
<b>640-0335-61</b>	57.40 (2.259)	38.45 (1.513)	96.35 (3.793)	78.70 (3.098)	53.00 (2.086)	72.20 (2.842)	108.60 (4.275)

mm / (inch)

ACCESSORIES

DEUTSCH Heat-Shrink Sleeves

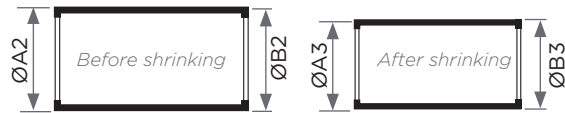
Standard Version



Sizes	Part Number	ØA min	ØB min	ØA1 max	ØB1 max
07	086-0104-06	43 (1.692)	43 (1.692)	28 (1.102)	10 (0.393)
12	086-0104-06	43 (1.692)	43 (1.692)	28 (1.102)	10 (0.393)
19	086-0104-06	43 (1.692)	43 (1.692)	28 (1.102)	10 (0.393)
27	086-0104-07	60 (2.362)	60 (2.362)	35 (1.377)	16 (0.629)
37	086-0104-07	60 (2.362)	60 (2.362)	35 (1.377)	16 (0.629)
61	086-0104-08	66 (2.598)	66 (2.598)	45 (1.771)	17 (0.669)
121	086-0104-08	66 (2.598)	66 (2.598)	45 (1.771)	17 (0.669)

mm / (inch)

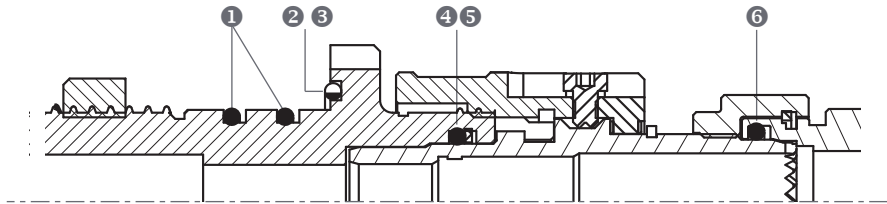
High Temperature Version



Sizes	Part Number	ØA2 min	ØB2 min	ØA3 max	ØB3 max
07	366-0011-06	38 (1.496)	38 (1.496)	19 (0.748)	19 (0.748)
12	366-0011-06	38 (1.496)	38 (1.496)	19 (0.748)	19 (0.748)
19	366-0011-06	38 (1.496)	38 (1.496)	19 (0.748)	19 (0.748)
27	366-0011-07	51 (2.007)	51 (2.007)	25.4 (0.999)	25.4 (0.999)
37	366-0011-07	51 (2.007)	51 (2.007)	25.4 (0.999)	25.4 (0.999)
61	366-0011-08	76 (2.992)	76 (2.992)	38 (1.496)	38 (1.496)

mm / (inch)

Gaskets and Counter-Gaskets for Shells and Accessories



Sizes	O-Ring for Type 61H	O-Ring for Type 31-61H	O-Ring for Type 25H	O-Ring for Type 51H
07	363-0262-20-**-000	363-0262-25-**-000	363-0262-19-**-000	363-0262-19-**-000
12	363-0262-21-**-000	363-0262-26-**-000	363-0262-20-**-000	363-0262-20-**-000
19	363-0262-23-**-000	363-0262-28-**-000	363-0262-22-**-000	363-0262-22-**-000
27	363-0262-28-**-000	363-0262-34-**-000	363-0262-25-**-000	363-0262-25-**-000
37	363-0262-31-**-000	363-0262-37-**-000	363-0262-27-**-000	363-0262-27-**-000
61	363-0262-35-**-000	363-0262-41-**-000	363-0262-33-**-000	363-0262-33-**-000
121	363-0262-44-**-000	363-0262-50-**-000	363-0262-42-**-000	363-0262-42-**-000

\*\* = 26 for 9316 (standard); O4 for 9316 HT or 563 mode

Sizes	Counter-Gasket for Receptacles	O-Ring for Receptacle	O-Ring for Accessory (Stainless)
07	363-7262-16 -***-000	363-0262-16-**-000	363-0262-17 -**-000
12	363-7262-17 -***-000	363-0262-17-**-000	363-0262-19 -**-000
19	363-7262-19 -***-000	363-0262-19-**-000	363-0262-21 -**-000
27	363-7262-23 -***-000	363-0262-23-**-000	363-0262-24 -**-000
37	363-7262-26 -***-000	363-0262-26-**-000	363-0262-26 -**-000
61	363-7262-30 -***-000	363-0262-30-**-000	363-0262-31 -**-000
121	363-7262-38 -***-000	363-0262-38-**-000	363-0262-38 -**-000

\*\* = 26 for 9316 (standard); O4 for 9316 HT or 563 mode  
 \*\*\* = 00 for 9316 (standard); O4 for 9316 HT or 563 mode

CONTACTS & TOOLING

Contact Size (AWG)	In-dex	Part Number	Type	Crimp barrel Ø mini (mm)	Cable			Filler Plugs	Crimping Tool		Insertion Tool Rear insertion tool	Extraction Tool Front insertion tool	Contact Retention Tool
					AWG wire	Section (mm <sup>2</sup> )	Ø sheath (mm)		Tool	Locator			
20	Without	<b>047-0894-20</b> <b>047-0893-20</b>	<b>P</b> <b>S</b>	1.30	18 to 24	0.22 to 0.93	1.52 to 2.54	006-0893-20	057-0461-11	057-0503-21	057-0473-60	057-0479-60	382-0038-20
	*	<b>047-1022-20</b> <b>047-1023-20</b>	<b>P</b> <b>S</b>	0.49	26 to 30	0.055 to 0.15			057-0463-12	057-0591-32	057-0473-60		
	*	<b>047-1024-20</b> <b>047-1025-20</b>	<b>P</b> <b>S</b>	2.50	16 to 18	0.93 to 1.34			057-0461-11	057-0503-21	057-0472-60		
16	Without	<b>047-0894-16</b> <b>047-0893-16</b>	<b>P</b> <b>S</b>	1.68	16 to 18	0.93 to 1.34	2.66 to 3.42	092-1057-16			057-0472-60	057-0478-60	382-0037-16
	*	<b>047-1022-16</b> <b>047-1023-16</b>	<b>P</b> <b>S</b>	1.30	18 to 24	0.22 to 0.93			057-0461-11	057-0503-21	057-0473-60		
	*	<b>047-1024-16</b> <b>047-1025-16</b>	<b>P</b> <b>S</b>	2.17	12 to 14	1.91 to 3.18					057-0471-60		
12	Without	<b>047-0894-12</b> <b>047-0893-12</b>	<b>P</b> <b>S</b>	2.52	12 to 14	1.91 to 3.18	3.80 to 4.95	092-1056-12			057-0471-60	057-0477-60	382-0036-12
	*	<b>047-1022-12</b> <b>047-1023-12</b>	<b>P</b> <b>S</b>	1.30	18 to 24	0.22 to 0.93			057-0461-11	057-0503-21	057-0473-60		
	*	<b>047-1024-12</b> <b>047-1025-12</b>	<b>P</b> <b>S</b>	1.96	14 to 18	0.93 to 1.91					057-0472-60		
8	Without	<b>047-1325-08</b> <b>047-1326-08</b>	<b>P</b> <b>S</b>	4.52	8	8.98	4.30 to 5.50	047-1052-08	382-0039-08		057-0474-60	057-0480-60	382-0023-08
	87	<b>047-1329-08</b> <b>047-1330-08</b>	<b>P</b> <b>S</b>	3.46	10	5.30							

- Standard contacts supplied with the connector
- \* Special contacts to be ordered separately

**Additional Tools:**

Pin wrench for torque wrench: 370-0964-01 (interface 20mm x 7mm)

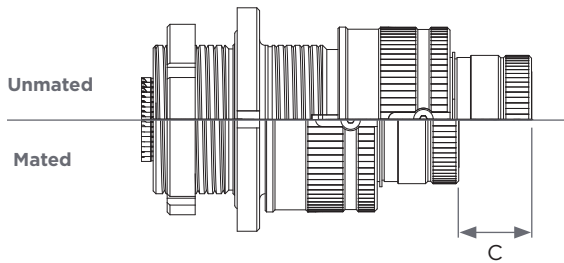
- Please contact us for coaxial contacts and tooling

**Services:**

Connector termination and testing can be performed on-site or at TE facilities.



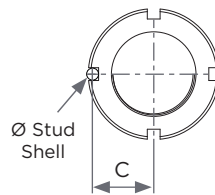
MATING & UNMATING - MOUNTING STYLE



Shell Size	C	Tightening Torque
<b>07</b>	33.20 (1.307)	50 Nm
<b>12</b>	33.20 (1.307)	55 Nm
<b>19</b>	33.20 (1.307)	60 Nm
<b>27</b>	33.20 (1.307)	60 Nm
<b>37</b>	33.20 (1.307)	70 Nm
<b>61</b>	33.20 (1.307)	80 Nm
<b>121</b>	48.20 (1.897)	110 Nm

mm / (inch)

Circular Receptacles - Types 21H - 31H - 41H - 61H

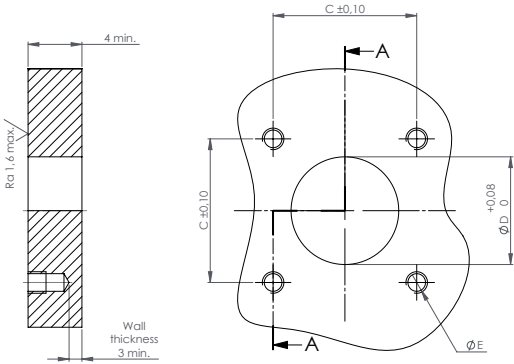


Shell Size	C	Ø Stud Shell
<b>07</b>	24.50 (0.964)	4.8 (0.188)
<b>12</b>	25.00 (0.984)	4.8 (0.188)
<b>19</b>	26.50 (1.043)	4.8 (0.188)
<b>27</b>	33.00 (1.299)	5.8 (0.228)
<b>37</b>	35.50 (1.397)	5.8 (0.228)
<b>61</b>	38.50 (1.515)	5.8 (0.228)
<b>121</b>	46.00 (1.811)	5.8 (0.228)

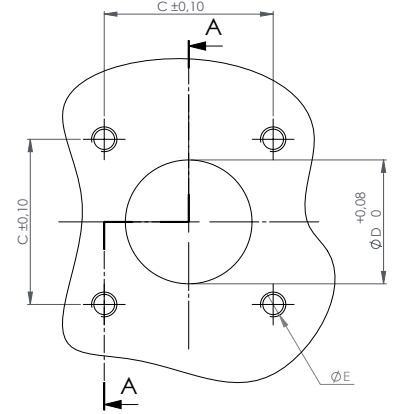
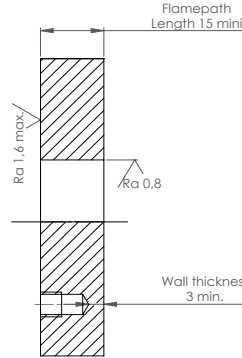
mm / (inch)

INTERFACES

25H



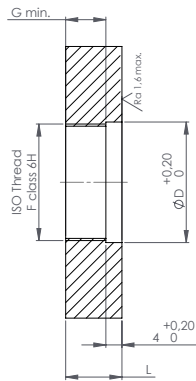
51H



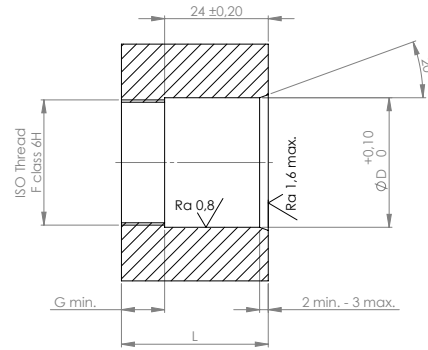
Shell Size	C	ØD	E
<b>07</b>	29 (1.141)	20 (0.787)	M5
<b>12</b>	30 (1.181)	23 (0.905)	M5
<b>19</b>	32 (1.259)	26 (1.023)	M5
<b>27</b>	40 (1.574)	30 (1.181)	M6
<b>37</b>	44 (1.732)	34.5 (1.358)	M6
<b>61</b>	49 (1.929)	43.5 (1.712)	M6
<b>121</b>	60 (2.362)	55 (2.165)	M6

mm / (inch)

21H - 31H - 41H



61H



Shell Size	ØD	G min	9316-21H			9316-31H		9316-41H		9316-61H	
			Thread	Pitch	L (without nut / with nut)	L (without nut / with nut)	L (without nut / with nut)	L (without nut / with nut)			
<b>07</b>	30 (1.181)	10 (0.393)	29	150	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			
	32	10	31	150	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			
<b>12</b>	35 (1.377)	10 (0.393)	34	150	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			
	42 (1.653)	10 (0.393)	41	200	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			
<b>37</b>	47 (1.850)	10 (0.393)	46	200	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			
	54 (2.125)	10 (0.393)	53	200	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			
<b>61</b>	68 (2.677)	13 (0.511)	67	250	24 max / 14 max	30 max / 20 max	35 max / 25 max	70 max / 60 max			

mm / (inch)



## For More Information

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