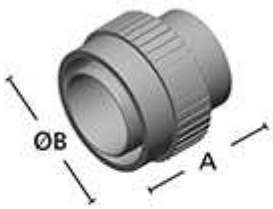
HDP20 Series Overview

The HDP20 Series is a heavy duty rated, environmentally sealed, composite shell, multi-pin connector. The composite thermoplastic shell is ideal in applications where chemicals can damage a connector housing. HDP20 features quick connect-disconnect bayonet coupling, single hole bulkhead mounting, silicone seals, and a rear insertion/rear removal contact system.

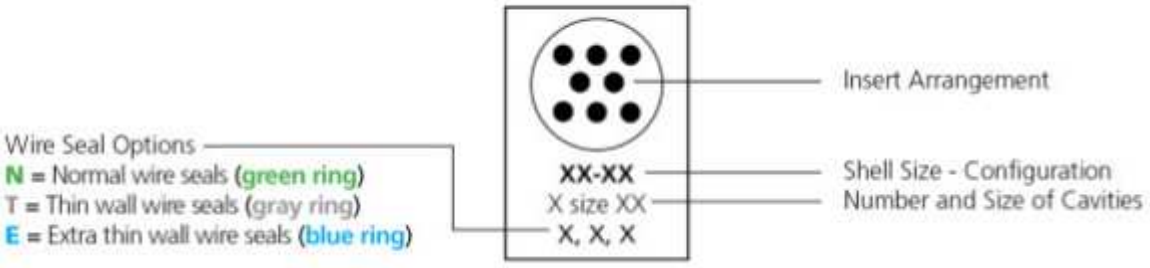
Dimensions



Shell Size	HD/HDP Plug		HD/HDP Receptacle	
	Overall Length A	Overall Height ØB	Overall Length C	Overall Height ØD
18	1.521 (38.63)	1.700 (43.17)	1.648 (41.86)	1.750 (44.45)
24	1.521 (38.63)	1.950 (49.53)	1.648 (41.86)	2.000 (50.80)

Dimensions are for reference only.

Configurations

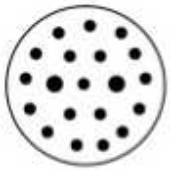


18 Shell Size Configurations

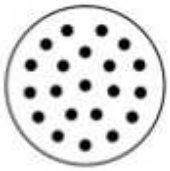
18-6
2 size 4 & 4 size 16
N, E

18-8
8 size 12
N, E

18-14
14 size 16
N, T, E



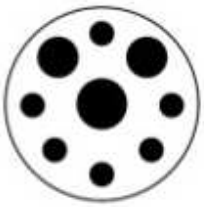
18-20
2 size 16 & 18 size 20
N, E



18-21
21 size 20
N

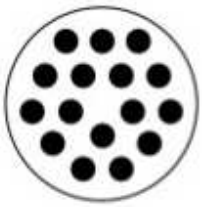
24 Shell Size Configurations

24-7(-C038 only)
3 size 4† & 4 size 16
N

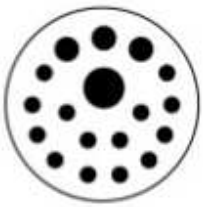


24-9
1 size 4, 2 size 8
& 6 size 12
N, E

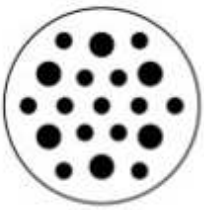
24-14
1 size 4, 1 size 12
& 12 size 16
N, E



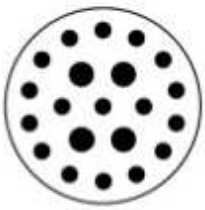
24-16
16 size 12
N, E



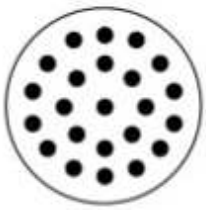
24-18
1 size 8, 3 size 12
& 14 size 16
N, E



24-19
6 size 12
& 13 size 16
N, E

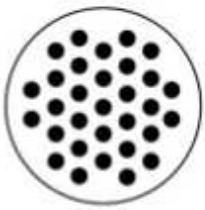


24-21
4 size 12
& 17 size 16
N, E

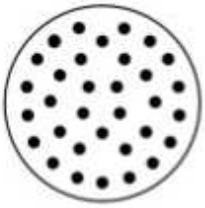


24-23
23 size 16
N, T, E

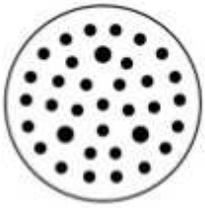
24-29
4 size 12, 19 size 16
& 6 size 20
E*



24-31
31 size 16
T*, E*



24-33
33 size 20
N



24-35
3 size 16 & 32 size 20
N, E

24-47
5 size16 & 42 size 20
E*

24-91-P064‡
2 size 8, 2 size 12
& 5 size 16
N, E

†Requires size 4 contact part numbers, 5960-203-04**(pin) and 5962-203-04**(socket)
*Modified seal, see drawing
‡Without P064 modification, plug cavities 4 and 5 are internally connected

Performance Specifications

DEUTSCH electrical connectors will stand up to the harsh environmental challenges that are common to industrial markets that require advanced performance. Proper parts, procedures, and tooling must be used.

Temperature

Operating at temperatures from -55° C to +125° C continuous at rated current.

Durability

No electrical or mechanical defects after 100 cycles of engagement and disengagement.

Vibration

No unlocking or unmating and exhibits no mechanical or physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond.

Physical Shock

No unlocking, unmating, or other unsatisfactory result during or after 50 G's in each of three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond. MIL-STD 202, Method 213, Condition "C".

Fluid Resistance

Connectors show no damage when exposed to most fluids used in industrial applications.

Insulation Resistance

1000 megohms minimum at 25° C.

Moisture Resistance

Properly wired and mated connections will withstand immersion under three feet of water without loss of electronic qualities or leakage.

Dielectric Withstanding Voltage

Current leakage less than 2 milliamps at 1500 VAC.

Thermal Cycle

No cracking, chipping or leaking after 20 test cycles from -55° C to +125° C.