

TECHNICAL DATA SHEET

# Harnessflex® Interconnect System

## Multi-Sleeve Adaptor



The Harnessflex® Interconnect System enables the fastening of Harnessflex fittings and connector interfaces to braiding, sleeving, heat shrink, self-close wrap and other forms of cable protection.

The **Multi-Sleeve Adaptor (MSA/MSAR)** is compatible with Harnessflex hinged fittings and connector interfaces.

**Certifications / Standards:**



Without the right cable protection system in place, electric vehicles may become prone to critical electrical failure which will cause them to breakdown, resulting in timetable disruptions and repair costs.

One of the **key areas at risk** is the vital link between cable and connector. Without robust backshell protection, cables running into connectors are often left exposed, leaving them open to intrusion, excessive strain and impact damage.

The Harnessflex® Interconnect System (Multi-Sleeve Adaptor), allows free rotation of braid and sleeving relative to backshell or fitting, reducing strain, intrusion and impact damage - all of which can lead to electrical faults and vehicle failure.

**Applications:**

- Construction vehicles
- Agricultural machinery
- Trucks and buses
- Heavy duty and special purpose vehicles
- Electric vehicles
- Mining and drilling machinery
- Municipal vehicles

**Material:**

- Nylon (PA66) (MSA)
- Thermoplastic (TPV) (MSAR)

**Temperature range:**

- -40°C to +120°C

**Ingress protection:**

- IP40

**Conforms to:**

- CE marked to Low Voltage Directive 2014/35/EU
- RoHS Compliant to 2015/863/EU

**Chemical resistance:**

- High (refer our chemical resistance guide)



Product information

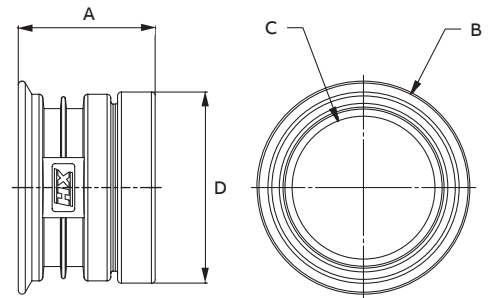
Part No. Nylon	Part No. TPV	Compatible with Part No.(s)	Compatible with Multi Function Clip	Nominal dimensions (mm)			For use inside slit-conduit (NC)
				A	B	C	
MSA08	MSAR08	CI08 / CIH08	CCSB08	17.0	13.5	5.7	NC16-S
MSA10	MSAR10	CI10 / CIH10	CCSB10	19.5	14.3	6.3	NC16-S
MSA12	MSAR12	CI12 / CIH12	CCSB12	17.8	15.7	7.6	NC18-S
MSA16	MSAR16	CI16 / CIH16	CCSB16	17.7	18.8	10.9	NC20-S
MSA20	MSAR20	CI20 / CIH20	CCSB20	17.5	23.9	14.5	NC25-S
MSA25	MSAR25	CI25 / CIH25	CCSB25	18.2	28.3	19.0	NC30-S
MSA28	MSAR28	CI28 / CIH28	CCSB28	18.1	30.9	21.6	NC30-S / NC32-S
MSA32	MSAR32	CI32 / CIH32	CCSB32	19.0	36.8	27.5	NC40-S
MSA40	MSAR40	CI40 / CIH40	CCSB40	21.6	44.8	33.8	-

\*Part number exceptions: CI08-DE001, CI08-PTD2, CI10-AM4, and all CI10-90\*\* Parts are incompatible with MSA/MSAR.

**Harnessflex®**  
Interconnect system  
(example).



Dimensions



Compatible with Harnessflex Multi-Function Clips or Ty-Rap® cable ties, the Harnessflex Interconnect System is available for all conduit outlet sizes NC08 to NC40 (excluding NC10).

**Features & benefits:**

- Easily secured with Harnessflex Multi-Function clips
- Hold cable bundles inside conduit
- Smooth cable entry and bore
- Easy assembly
- External hinged connector interfaces - Tough and durable protection for OEM connectors against high pressure wash-down, excessive cable strain and mechanical abrasion
- Connect seamlessly with Multi-Sleeve Adaptor
- Internal conduit backstop provide insertion guide ensuring system integrity and high pull off strength

Support improved strain relief of backshells and other hinged fittings, by improving slit conduit wall integrity.

**Features & benefits:**

- Hold cable bundles inside slit conduit and reduce risk of cables protruding out of slit conduit
- Reduce vibration risk by minimising impact of cable on conduit inner wall

**Harnessflex®** slit-conduit + Multi-Sleeve Adaptor + Connector Interface (backshell).



Insert the Multi-Sleeve Adaptor into the Harnessflex® slit-conduit.



The Multi-Sleeve Adaptor fully inserted, facing into the slit-conduit.



The tensile strength of your slit-conduit to connector backshell connection will now be improved.

**Optional**



Attach a Multi Function Clip (CCSB) as shown, to further improve slit wall integrity.