

PRODUCT OVERVIEW

## **Harnessflex**®

Fast-Fit





## Harnessflex®

Fast-Fit

Harnessflex® Fast-Fit represents a unique and innovative solution in flexible conduit systems - designed and recommended for use with NC Conduit.



Until now, manufacturers have produced fittings and seals separately, and assembled them together, or had the customer assemble them. This increases assembly time and introduces the possibility for errors.

## **Key features:**

- Nylon 66 body
- · Lighter in weight
- Quicker to install (cut & assemble fittings)
- Wide variety of sizes
- · Better fatigue life
- Return to shape



OVERVIEW 3





Harnessflex® Fast-Fit uses a sophisticated moulding process to mould an internal conduit seal and a face seal washer. This makes installation times very fast, and extremely reliable, because the seals cannot be left out. The conduit system also benefits from the highest IP rating possible.

The Harnessflex® Fast-Fit series provides maximum cable protection to the highest possible IP rating when used with Harnessflex NC solid conduits.

## Material:

- Polyamide 6,6 (Nylon) body / TPE Seals
- Very high UV resistance
- Heat stabilised (Self-extinguishing, low smoke toxicity & halogen free)

## Ingress protection:

• IP66 / 67 / 68 (2 bar 30 mins) / 69K

#### Compatible conduits:

• All Harnessflex NC conduits

#### Conformity:

- CE Mark to the low voltage directive
- RoHS Compliant to 2011/65/EU
- Conforms with end of life vehicle directive (ELV) EU200/53/EC

## Temperature range:

- Static Long Term -50°C to +105°C
- Static Short Term (3000 Hours) -50°C to +120°C
- Dynamic Long Term -45°C to +105°C
- Dynamic Short Term (5000 operations @MBR)
  -45°C to +120°C

01 Harnessflex® Fast-Fit Type A fitting.

02 Harnessflex® Fast-Fit Type C90 fitting.

#### Features & benefits:

- One piece design with integrated conduit and thread sealing
- Provides continuation of cable protection between conduit and cable entry points
- High level of mechanical protection and highest degree of ingress protection against solids and liquids
- · Secure conduit clip design
- Fixed external male thread for insertion into metric threaded entries or knockout holes (lock nuts included)
- · Conduit and thread size indicators

## **Applications:**

- Construction vehicles
- · Agricultural machinery
- Trucks
- Heavy duty and special purpose vehicles

## Harnessflex® Fast-Fit

Type A fittings (blue elastomer)



## Fast-Fit Type A fittings (blue elastomer)

Straight fitting with a fixed external male thread (Metric or NPT)

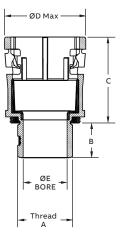
Materials: Polyamide (nylon) 66/TPE Colour: Black (BL) / Blue (B) Elastomer

Type A fitting (blue elastomer)



Part No.	Metric			Nominal	dimensions (mm)
(Metric)	thread A	В	С	D	E
HTS12/M16/A	M16 x 1.5	11.8	34.2	21.2	11.2
HTS16/M16/A	M16 x 1.5	11.8	36.0	23.2	11.2
HTS16/M20/A	M20 x 1.5	11.8	36.0	23.2	15.2
HTS20/M20/A	M20 x 1.5	11.8	39.5	30.2	15.2
HTS28/M25/A	M25 x 1.5	15.8	39.5	37.2	20.0
HTS32/M32/A	M32 x 1.5	15.8	41.0	44.2	26.7
HTS40/M40/A	M40 x 1.5	15.8	50.8	54.2	34.0
HTS50/M50/A	M50 x 1.5	15.8	56.3	65.0	44.0

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread.



rovals	IP rating	Appropriate conduit	Temperature range
	For use with: Typ	e NC solid	Static applications: -50°C to +120°C
	IP40	Yes	Moving applications: -45°C to +120°C
Intertek	IP65	Yes	
C TUS ROHS	<b>IP68</b> 2 b	Yes ar 30mins with Solid NC Conduits	
	IP69	Yes	

TYPE A & C90 FITTINGS

## Harnessflex® Fast-Fit

Type C90 fittings (blue elastomer)



## Type C90 fitting (blue elastomer)

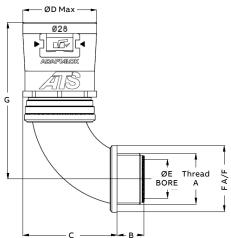
## Fast-Fit Type A fittings (blue elastomer)

90° Elbow fitting with a fixed external male thread (Metric or NPT)

Materials: Polyamide (nylon) 66/TPE Colour: Black (BL) / Blue (B) Elastomer

Part No.	Metric					Nominal dimensio (m	
(Metric)	thread A	В	С	D	Е	F	G
HTS12/M16/C90	M16 x 1.5	11.5	31.5	21.2	11.0	22.0	65.2
HTS16/M16/C90	M16 x 1.5	11.5	33.1	23.2	11.0	22.0	65.2
HTS16/M20/C90	M20 x 1.5	13.0	34.2	23.3	11.0	27.0	70.0
HTS20/M20/C90	M20 x 1.5	13.0	36.1	30.2	15.4	27.0	72.0
HTS28/M25/C90	M25 x 1.5	15.0	45.1	37.2	19.0	32.1	76.4
HTS32/M32/C90	M32 x 1.5	16.0	57.0	44.2	25.9	38.9	86.4
HTS40/M40/C90	M40 x 1.5	16.0	73.5	54.2	33.3	57.4	104.7
HTS50/M50/C90	M50 x 1.5	16.0	94.5	65.0	43.8	59.0	127.6

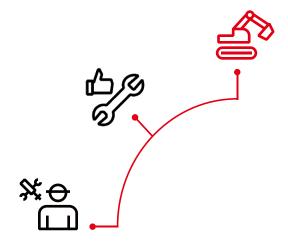
For insertion into knockouts using a locknut. Locknut supplied with METRIC thread.



Approvals	IP rating	Appropriate conduit	Temperature range	
22 11 2	For use with: Ty	pe NC solid	Static applications: -50°C to +120°C	
	IP40	Yes	Moving applications: -45°C to +120°C	
KM35161 LOW VOCTORE Intertek	IP65	Yes		
C SUS ROHS	IP68	Yes bar 30mins with Solid NC Conduits		
	IP69	Yes		

## Harnessflex® Fast-Fit

## Properties



## Dynamic & thermal properties

Test type	Standard	Requirement	Result
Dynamic applications	IEC61386-1	5000 Operations in 2 hours at MBR*	-45°C to +120°C
Static short term temperature		Temporary use (3,000 hours)	-50°C to +120°C
Static long term temperature		Permanent use (30,000 hours)	-40°C to +105°C

<sup>\*</sup> Conduit Minimum Bend Radius (MBR)

## Flammability

Test type	Standard	Requirement	Result
Glow wire	BS EN 60695-2-11	Extinguish within 30 seconds	850°C
Flammability	IEC 61386-1-12	1Kw Burner flame to self-extinguish	Pass
Oxygen index - Nylon body	ISO 4589-2	-	24.1%
Ignition rating - Nylon body	NF F16-101	l Rating	14
Oxygen index - Elastomer seal	ISO 4589-2	-	20.2%
Ignition rating - Elastomer seal	NF F16-101	l Rating	14

## Toxicity

Test type	Standard	Requirement	Result
Halogen Free	NFX 70-100	< 0.5%	Pass

## Smoke

Test type	Standard	Requirement	Result
Fume rating - Nylon body	NF F16-101	F Rating	F2
Fume Rating - Elastomer seal	NF F16-101	F Rating	F2

## Pre-test conditions

Duration	Standard	Temperature	Relative humidity
168 hours	BS EN IEC61386	23°C	50%

## Harnessflex® Fast-Fit

Removal tool

# Fast removal of fittings



01 Harnessflex® Fast-Fit removal tool.

The Harnessflex® Fast-Fit Removal tool for simple, safe removal of Fast-Fit fittings.

## Instructions:

- 1. Slide removal tool over condui
- 2. Align tabs with retention clips on fitting
- 3. Slide removal tool into fitting, pushing the tabs underneath the clips
- 4. Remove fitting from conduit

## Features & benefits:

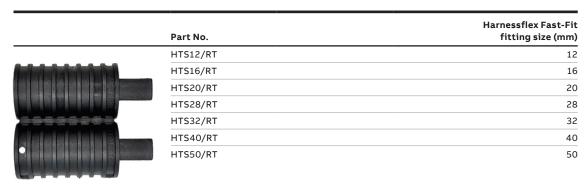
• Safe and simple removal and of Harnessflex Fast-Fit fittings

## Material:

- Polyamide 6
- Black



## Harnessflex® Fast-Fit removal tool







**ABB Cable Management Products Ltd** 

CMG House Station Road Coleshill Birmingham B46 1HT Tel: +44 (0) 1675 468 200

For Sales Support contact:

gb-cmg.salessupport@abb.com For Technical Support contact: cmg.conduitsystems@abb.com For Sample Support contact: gb-sample-requests@abb.com

harnessflex.com