



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Operating voltage	10 ... 30 V DC , ripple 10 % _{SS}
Rated operational current	200 mA , short-circuit/overload protected
Synchronization	bi-directional
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	ABS
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP54
Connection type	Device connector M12 x 1 , 5-pin



Properties

- Up to 6000 mm sensing range versions
- DC, switching output
- Surface mount F42 housing, front view
- Connector version

Your Benefit

- Simple pushbutton configuration

Model Number

		UB500-F42-E4-V15	UB500-F42-E5-V15	UB2000-F42-E4-V15	UB2000-F42-E5-V15	UB4000-F42-E4-V15	UB4000-F42-E5-V15	UB6000-F42-E4-V15	UB6000-F42-E5-V15
Sensing range	30 ... 500 mm	●	●						
	60 ... 2000 mm			●	●				
	200 ... 4000 mm					●	●		
	350 ... 6000 mm							●	●
Transducer frequency	approx. 390 kHz	●	●						
	approx. 175 kHz			●	●				
	approx. 85 kHz					●	●		
	approx. 65 kHz							●	●
No-load supply current	≤ 50 mA	●	●	●	●			●	●
	≤ 60 mA					●	●	●	●
Output type	1 switch output E4, NPN, NO/NC, programmable	●	●	●	●	●	●	●	●
	1 switch output E5, PNP NO/NC, programmable		●		●		●		●
Switching frequency	≤ 0.6 Hz							●	●
	≤ 1.2 Hz					●	●		
	≤ 2.7 Hz			●	●				
	≤ 8 Hz	●	●						

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●	●	●	●	●

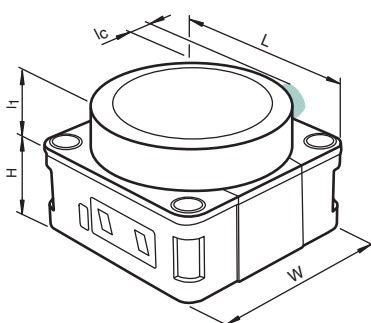
Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l ₁ [mm]	0 16
Connector area l _c [mm]	16

Accessories

This and more accessories can be found in chapter 3.5 from page 673
See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors
V15-G-2M-PVC	Cable socket, M12, 5-pin, PVC cable
V15-W-2M-PUR	Cable socket, M12, 5-pin, PUR cable

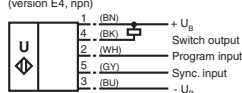


Electrical Connection



UB500-F42-E4-V15
UB2000-F42-E4-V15
UB4000-F42-E4-V15
UB6000-F42-E4-V15

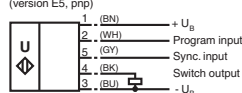
Standard symbol/Connections:
(version E4, npn)



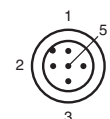
Wire colors in accordance with EN 60947-5-2.

UB500-F42-E5-V15
UB2000-F42-E5-V15
UB4000-F42-E5-V15
UB6000-F42-E5-V15

Standard symbol/Connections:
(version E5, pnp)



Wire colors in accordance with EN 60947-5-2.



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Operating voltage	10 ... 30 V DC , ripple 10 % _{SS}
Rated operational current	200 mA , short-circuit/overload protected
Synchronization	bi-directional
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	ABS
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP54
Connection type	Device connector M12 x 1 , 5-pin



Properties

- Up to 6000 mm sensing range versions
- DC, 2 switching outputs
- Surface mount F42 housing, front view
- Connector version

Your Benefit

- Simple pushbutton configuration

Model Number

		UB500-F42-E6-V15	UB500-F42-E7-V15	UB2000-F42-E6-V15	UB2000-F42-E7-V15	UB4000-F42-E6-V15	UB4000-F42-E7-V15	UB6000-F42-E6-V15	UB6000-F42-E7-V15
Sensing range	green = preferred type	●	●	●	●	●	●	●	●
	30 ... 500 mm								
	60 ... 2000 mm			●	●				
	200 ... 4000 mm					●	●		
	350 ... 6000 mm							●	●
Transducer frequency	approx. 390 kHz	●	●						
	approx. 175 kHz			●	●				
	approx. 85 kHz					●	●		
	approx. 65 kHz							●	●
No-load supply current	≤ 50 mA	●	●	●	●			●	●
	≤ 60 mA					●	●	●	●
Output type	2 switch outputs NPN, normally open/								
	close selectable		●		●		●		●
	2 switch outputs PNP, NO/NC selectable	●		●		●		●	
Switching frequency	≤ 0.6 Hz							●	●
	≤ 1.2 Hz					●	●		
	≤ 2.7 Hz			●	●				
	≤ 8 Hz	●	●						

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●	●	●	●	●

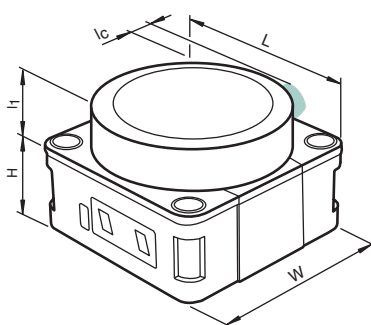
Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l _t [mm]	0 16
Connector area l _c [mm]	16

Accessories

This and more accessories can be found in chapter 3.5 from page 673
See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors
V15-G-2M-PVC	Cable socket, M12, 5-pin, PVC cable
V15-W-2M-PUR	Cable socket, M12, 5-pin, PUR cable

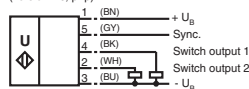


Electrical Connection



UB500-F42-E6-V15
UB2000-F42-E6-V15
UB4000-F42-E6-V15
UB6000-F42-E6-V15

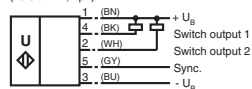
Standard symbol/Connections:
(version E6, pnp)



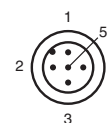
Core colours in accordance with EN 60947-5-2.

UB500-F42-E7-V15
UB2000-F42-E7-V15
UB4000-F42-E7-V15
UB6000-F42-E7-V15

Standard symbol/Connections:
(version E7, npn)



Core colours in accordance with EN 60947-5-2.



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)

Date of issue: 04/08/2015



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Deviation of the characteristic curve	± 1 % of full-scale value
Synchronization	bi-directional
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	ABS
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP54
Connection type	Device connector M12 x 1, 5-pin



Properties

- Up to 6000 mm sensing range versions
- DC, analog output
- Surface mount F42 housing, front view
- Connector version

Your Benefit

- Simple pushbutton configuration

Model Number

		UB500-F42-I-V15	UB500-F42-U-V15	UB2000-F42-I-V15	UB2000-F42-U-V15	UB4000-F42-I-V15	UB4000-F42-U-V15	UB6000-F42-I-V15	UB6000-F42-U-V15
Sensing range	green = preferred type	●	●	●	●	●	●	●	●
	30 ... 500 mm								
	60 ... 2000 mm								
	200 ... 4000 mm								
	350 ... 6000 mm								
Transducer frequency	approx. 390 kHz	●	●						
	approx. 175 kHz			●	●				
	approx. 85 kHz					●	●		
	approx. 65 kHz							●	●
Operating voltage	10 ... 30 V DC, ripple 10 % _{SS}	●	●	●	●	●	●	●	●
	17 ... 30 V DC, ripple 10 % _{SS}								
No-load supply current	≤ 50 mA	●	●	●	●	●	●	●	●
	≤ 60 mA								
Output type	1 analog output 0 ... 10 V		●		●		●		●
	1 analog output 4 ... 20 mA	●		●		●		●	
Resolution	0.2 mm at max. sensing range	●	●						
	0.7 mm			●	●	●	●	●	●

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●	●	●	●	●

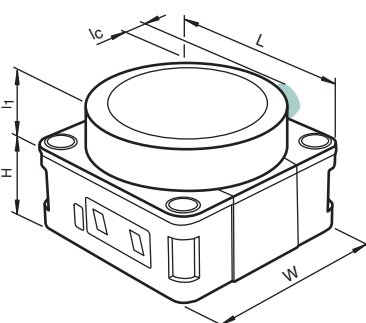
Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l _t [mm]	0 16
Connector area l _c [mm]	16

Accessories

This and more accessories can be found in chapter 3.5 from page 673
See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors
DA5-IU-2K-V	Process control and indication equipment
V15-G-2M-PVC	Cable socket, M12, 5-pin, PVC cable
V15-W-2M-PUR	Cable socket, M12, 5-pin, PUR cable

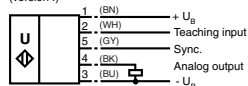


Electrical Connection



UB500-F42-I-V15
UB2000-F42-I-V15
UB4000-F42-I-V15
UB6000-F42-I-V15

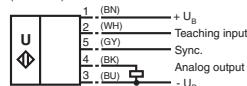
Standard symbol/Connections:
(version I)



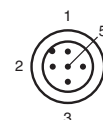
Core colours in accordance with EN 60947-5-2.

UB500-F42-U-V15
UB2000-F42-U-V15
UB4000-F42-U-V15
UB6000-F42-U-V15

Standard symbol/Connections:
(version U)



Core colours in accordance with EN 60947-5-2.



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Operating voltage	20 ... V DC ... 253 V AC
No-load supply current	≤ 60 mA
Output type	1 relay output
Rated operational current	3 A
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	PBT
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP65
Connection	5-pin V95 connector (7/8"-16 UN 2A)



Properties

- Up to 5000 mm sensing range versions
- AC/DC, relay output
- Surface mount F42 housing, front view
- Connector version

Your Benefit

- Simple pushbutton configuration

Model Number

		UB400-F42-UK-V95	UB1500-F42-UK-V95	UB3000-F42-UK-V95	UB5000-F42-UK-V95
Sensing range	40 ... 400 mm	●			
	70 ... 1500 mm		●		
	200 ... 3000 mm			●	
	350 ... 5000 mm				●
Transducer frequency	approx. 390 kHz	●			
	approx. 175 kHz		●		
	approx. 85 kHz			●	
	approx. 65 kHz				●
Switching frequency	≤ 0.6 Hz				●
	≤ 1.5 Hz			●	
	≤ 3 Hz		●		
	≤ 8 Hz	●			

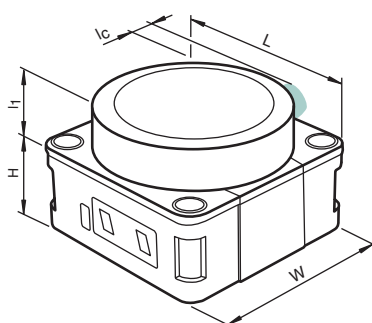
Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l ₁ [mm]	0 16
Connector area l _c [mm]	16

Accessories

This and more accessories can be found in chapter 3.5 from page 673
See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

V95-G	Female connector, 7/8" - 16 UN, 5-pin, field attachable
V95-W-5M-PVC	Female connector, 7/8", 5-pin, PVC cable
V95-W	Field attachable female cordset
V95-W-2M-PVC	Female connector, 7/8", 5-pin, PVC cable
MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors

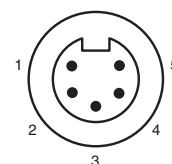


Electrical Connection



UB400-F42-UK-V95
UB1500-F42-UK-V95
UB3000-F42-UK-V95
UB5000-F42-UK-V95

Standard symbol/Connections:
(version UK)



Wire colors

1	WH	(white)
2	RD	(red)
3	GN	(green)
4	OR	(orange)
5	BK	(black)





Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Operating voltage	10 ... 30 V DC , ripple 10 % _{SS}
No-load supply current	≤ 50 mA
Rated operational current	200 mA , short-circuit/overload protected
Synchronization	bi-directional
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	ABS
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP54
Connection type	Device connector M12 x 1 , 5-pin



Properties

- 500 mm and 2000 mm sensing range versions
- DC, 1 and 2 switching outputs versions
- Surface mount F42 housing, side view
- Connector version

Your Benefit

- Simple pushbutton configuration

Model Number

		UB500-F42S-E4-V15	UB500-F42S-E5-V15	UB500-F42S-E6-V15	UB500-F42S-E7-V15	UB2000-F42S-E4-V15	UB2000-F42S-E5-V15	UB2000-F42S-E6-V15	UB2000-F42S-E7-V15
Sensing range	30 ... 500 mm	●	●	●	●	●	●	●	●
Transducer frequency	60 ... 2000 mm	●	●	●	●	●	●	●	●
	approx. 390 kHz								
	approx. 175 kHz								
Output type	1 switch output E4, NPN, NO/NC, programmable	●				●			
	1 switch output E5, PNP NO/NC, programmable		●				●		
	2 switch outputs NPN, normally open/close selectable			●					●
	2 switch outputs PNP, NO/NC selectable			●				●	
Switching frequency	≤ 2.7 Hz	●	●	●	●	●	●	●	●
	≤ 8 Hz	●	●	●	●	●	●	●	●

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●	●	●	●	●

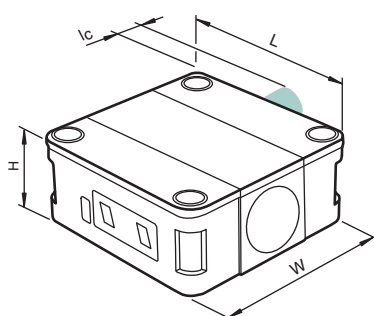
Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l ₁ [mm]	0
Connector area l _c [mm]	16

Accessories

This and more accessories can be found in chapter 3.5 from page 673
See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

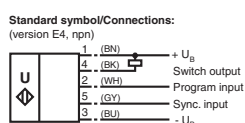
MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors
V15-G-2M-PVC	Cable socket, M12, 5-pin, PVC cable
V15-W-2M-PUR	Cable socket, M12, 5-pin, PUR cable



Electrical Connection

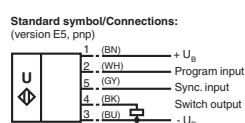


UB500-F42S-E4-V15
UB2000-F42S-E4-V15



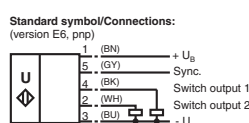
Wire colors in accordance with EN 60947-5-2.

UB500-F42S-E5-V15
UB2000-F42S-E5-V15



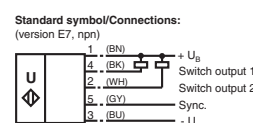
Wire colors in accordance with EN 60947-5-2.

UB500-F42S-E6-V15
UB2000-F42S-E6-V15

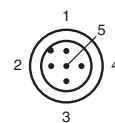


Core colours in accordance with EN 60947-5-2.

UB500-F42S-E7-V15
UB2000-F42S-E7-V15



Core colours in accordance with EN 60947-5-2.



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Operating voltage	20 ... V DC ... 253 V AC
No-load supply current	≤ 60 mA
Output type	1 relay output
Rated operational current	3 A
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	PBT
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP65
Connection	5-pin V95 connector (7/8"-16 UN 2A)



Properties

- 400 mm and 1500 mm sensing range versions
- AC/DC, relay output
- Surface mount F42 housing, side view
- Connector version

Your Benefit

- Simple pushbutton configuration

Model Number

		UB400-F42S-UK-V95	UB1500-F42S-UK-V95
Sensing range	40 ... 400 mm	●	
	70 ... 1500 mm		●
Transducer frequency	approx. 390 kHz	●	
	approx. 175 kHz		●
Switching frequency	≤ 3 Hz		●
	≤ 8 Hz	●	

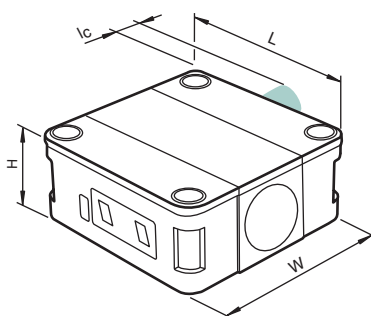
Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l _t [mm]	0
Connector area l _c [mm]	16

Accessories

This and more accessories can be found in chapter 3.5 from page 673
See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

V95-G	Female connector, 7/8" - 16 UN, 5-pin, field attachable
V95-W-5M-PVC	Female connector, 7/8", 5-pin, PVC cable
V95-W	Field attachable female cordset
V95-W-2M-PVC	Female connector, 7/8", 5-pin, PVC cable
MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors

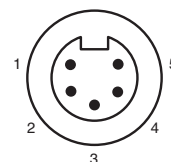
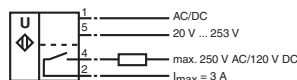


Electrical Connection



UB400-F42S-UK-V95
UB1500-F42S-UK-V95

Normsymbol/Anschluss:
(Version UK)



Wire colors

1	WH	(white)
2	RD	(red)
3	GN	(green)
4	OR	(orange)
5	BK	(black)





Properties

- 500 mm and 2000 mm sensing range versions
- DC, analog output
- Surface mount F42 housing, side view
- Connector version

Your Benefit

- Simple pushbutton configuration

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Deviation of the characteristic curve	± 1 % of full-scale value
Synchronization	bi-directional
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Material	
Housing	ABS
Transducer	epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT
Protection degree	IP54
Connection type	Device connector M12 x 1, 5-pin



Model Number

		UB500-F42S-I-V15	UB500-F42S-U-V15	UB2000-F42S-I-V15	UB2000-F42S-U-V15
Sensing range	30 ... 500 mm	●	●		
	60 ... 2000 mm			●	●
Transducer frequency	approx. 390 kHz	●	●		
	approx. 175 kHz			●	●
Operating voltage	10 ... 30 V DC, ripple 10 % _{SS}	●		●	
	17 ... 30 V DC, ripple 10 % _{SS}		●		●
No-load supply current	≤ 50 mA	●	●	●	●
Output type	1 analog output 0 ... 10 V		●		●
	1 analog output 4 ... 20 mA	●		●	
Resolution	0.2 mm at max. sensing range		●		
	0.2 mm for max. detection range	●			
	0.7 mm			●	●

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●

Dimensions

Length L [mm]	80
Width W [mm]	80
Height H [mm]	34
Transducer length l _t [mm]	0
Connector area l _c [mm]	16

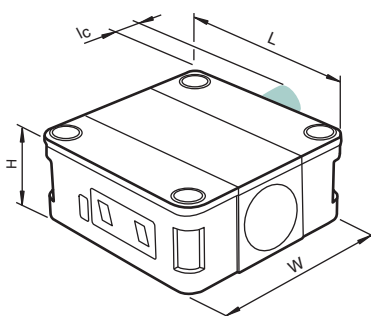
Accessories

This and more accessories can be found in chapter 3.5 from page 673

See pages from 972 ... for cordsets

See pages 1068 ... for mounting aids

MH 04-3505	Mounting aid for FP sensors
MHW 11	Mounting brackets for sensors
DA5-IU-2K-V	Process control and indication equipment
V15-G-2M-PVC	Cable socket, M12, 5-pin, PVC cable
V15-W-2M-PUR	Cable socket, M12, 5-pin, PUR cable

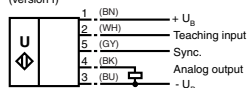


Electrical Connection



UB500-F42S-I-V15
UB2000-F42S-I-V15

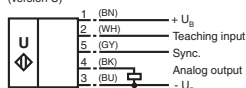
Standard symbol/Connections:
(version I)



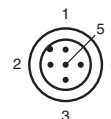
Core colours in accordance with EN 60947-5-2.

UB500-F42S-U-V15
UB2000-F42S-U-V15

Standard symbol/Connections:
(version U)



Core colours in accordance with EN 60947-5-2.



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)