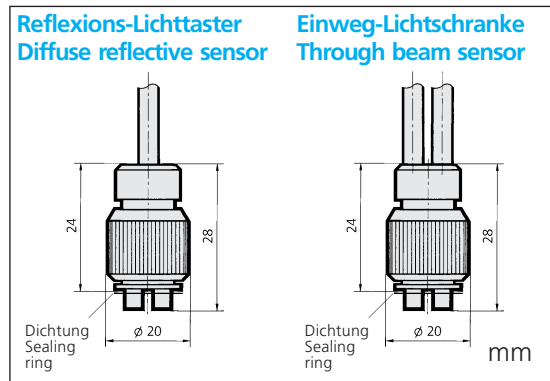


Lichtleitkabel WRB... Fibre-optic cables



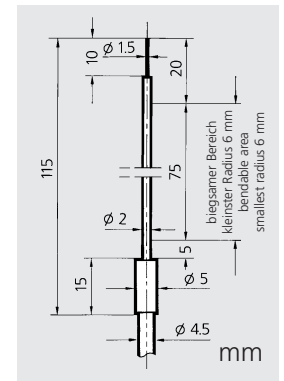
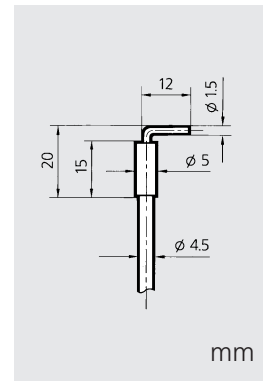
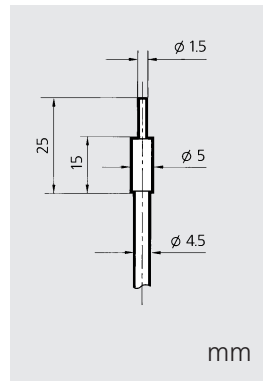
Lichtleitkabelanschluß / Fibre-optic connection



Faserbündel mm
Fibre bundle mm
Ø 1,0

Ø 1,0

Ø 1,0



Hochwertige Glasfasern
Hohe Temperaturbeständigkeit
Robust, hochflexibel
Sonderanfertigungen

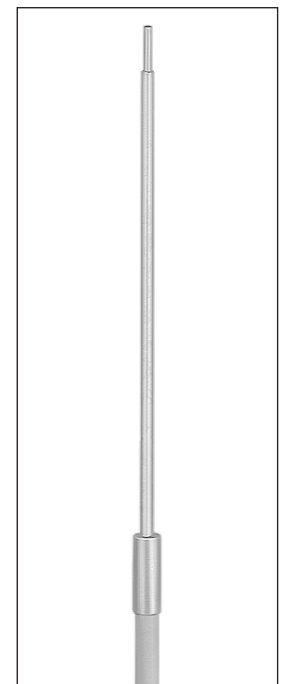
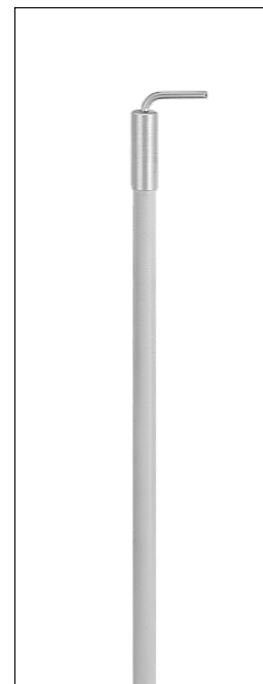
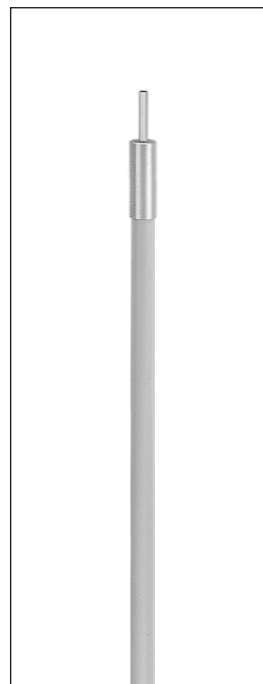
High-quality glass fibres
Resistant to high temperature
Robust, highly flexible
Special types

* Alle angegebenen Tast- bzw. Reichweiten in den folgenden Datenblättern sind Durchschnittswerte in Verbindung mit dem Lichtleitkabel-Verstärker in Infrarotlicht. Erforderlichenfalls ist der Empfindlichkeitsbereich mit dem Grundempfindlichkeits-Potentiometer P2 anzupassen. In Rotlicht reduzieren sich die angegebenen Tast- und Reichweiten auf ca. 80 % und in Grünlicht auf ca. 30 %. Die Werte sind ferner abhängig vom Lichtleitkabel sowie vom abzutastenden Objekt (Größe, Form, Oberfläche, Farbe usw.).

* All scanning and sensing ranges given in the following data-sheets are average values in connection with the infrared light model of the fibre-optic amplifiers. The basic adjustment of sensitivity can be effected by means of the potentiometer P2. With red light the given scanning and sensing ranges are reduced to approx. 80 % and with green light to approx. 30 %. Furthermore the values depend on the fibre-optic cable as well as the scanned object (size, shape, surface, colour, etc.).

**Mit Vorsatzoptik und axialem Lichtaustritt (siehe Seite 9). Nur bei entsprechend langem Lichtleitkabel möglich.

** With auxiliary optics and axial light emission (see page 9). Only possible with a fibre-optic cable of appropriate length.



Reflexions-Lichttaster / Diffuse reflective sensors

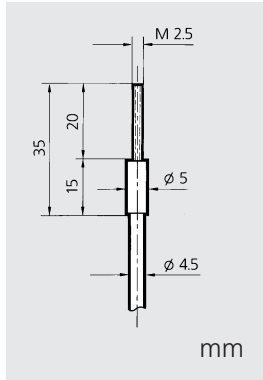
Tastweite bis *		Scanning range up to *		30 mm	25 mm	30 mm
mit Analogverstärker		with analog amplifier		7 mm	7 mm	7 mm
Länge/mm		Length/mm		Typ/Model	Typ/Model	Typ/Model
	Silikon-Schlauch	Silicone tubing	300	WRB 110S -1,5 -1,0	WRB 110S -90 -1,5 -1,0	WRB 110SB -2,0 -1,0
			600	WRB 120S -1,5 -1,0	WRB 120S -90 -1,5 -1,0	WRB 120SB -2,0 -1,0
			1000	WRB 130S -1,5 -1,0	WRB 130S -90 -1,5 -1,0	WRB 130SB -2,0 -1,0
	Metall-Schlauch	Metal tubing	300	WRB 110M -1,5 -1,0	WRB 110M -90 -1,5 -1,0	WRB 110MB -2,0 -1,0
			600	WRB 120M -1,5 -1,0	WRB 120M -90 -1,5 -1,0	WRB 120MB -2,0 -1,0
			1000	WRB 130M -1,5 -1,0	WRB 130M -90 -1,5 -1,0	WRB 130MB -2,0 -1,0
	PU-Schlauch	PU tubing	300			
			600			
			1000			

Einweg-Lichtschränken / Through beam sensors

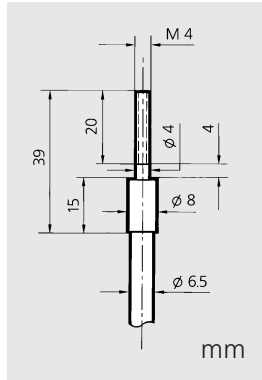
Reichweite bis *		Sensing range up to *		250 mm	220 mm	250 mm
Länge/mm		Length/mm		Typ/Model	Typ/Model	Typ/Model
	Silikon-Schlauch	Silicone tubing	300	WRB 210S -1,5 -1,0	WRB 210S -90 -1,5 -1,0	WRB 210SB -2,0 -1,0
			600	WRB 220S -1,5 -1,0	WRB 220S -90 -1,5 -1,0	WRB 220SB -2,0 -1,0
			1000	WRB 230S -1,5 -1,0	WRB 230S -90 -1,5 -1,0	WRB 230SB -2,0 -1,0
	Metall-Schlauch	Metal tubing	300	WRB 210M -1,5 -1,0	WRB 210M -90 -1,5 -1,0	WRB 210MB -2,0 -1,0
			600	WRB 220M -1,5 -1,0	WRB 220M -90 -1,5 -1,0	WRB 220MB -2,0 -1,0
			1000	WRB 230M -1,5 -1,0	WRB 230M -90 -1,5 -1,0	WRB 230MB -2,0 -1,0
	PU-Schlauch	PU tubing	300			
			600			
			1000			

Silikonummantelte Lichtleitkabel der Länge 600 mm (**fettgedruckt**) sind Vorzugstypen und überwiegend ab Lager erhältlich
Silicone-coated fibre-optic cables in length 600 mm (**bold printed**) are preferential types and mainly available from stock

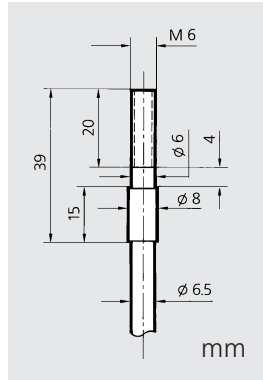
Ø 1,5



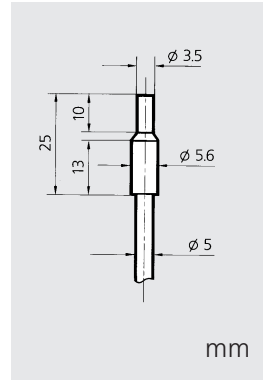
Ø 2,5



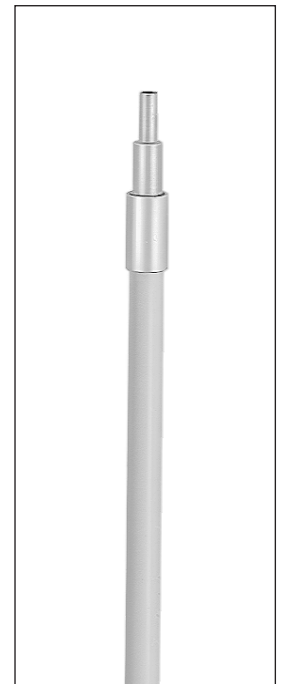
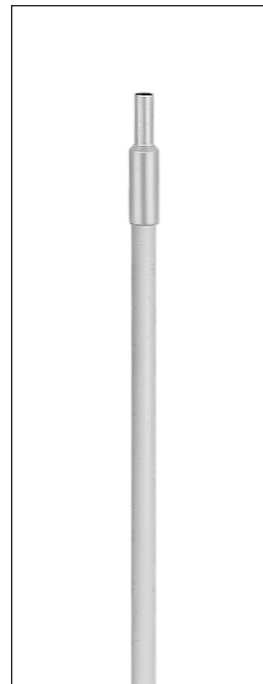
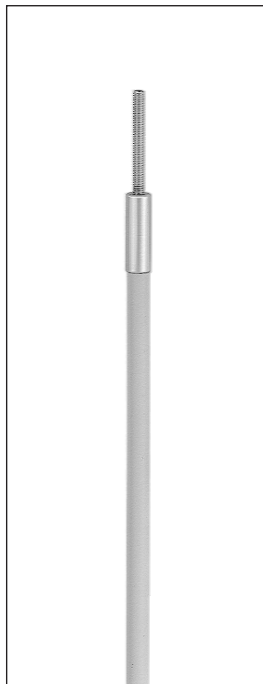
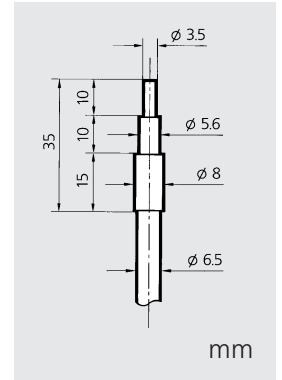
Ø 2,5



Ø 2,5



Ø 2,5



50 mm

20 mm

Typ/Model

WRB 110S -M2,5 -1,5

WRB 120S -M2,5 -1,5

WRB 130S -M2,5 -1,5

WRB 110M -M2,5 -1,5

WRB 120M -M2,5 -1,5

WRB 130M -M2,5 -1,5

150 mm

50 mm

Typ/Model

WRB 110S -M4 -2,5

WRB 120S -M4 -2,5

WRB 130S -M4 -2,5

WRB 110M -M4 -2,5

WRB 120M -M4 -2,5

WRB 130M -M4 -2,5

150 mm

50 mm

Typ/Model

WRB 110S -M6 -2,5

WRB 120S -M6 -2,5

WRB 130S -M6 -2,5

WRB 110M -M6 -2,5

WRB 120M -M6 -2,5

WRB 130M -M6 -2,5

150 mm

50 mm

Typ/Model

WRB 110P -5,6 -2,5

WRB 120P -5,6 -2,5

WRB 130P -5,6 -2,5

150 mm

50 mm

Typ/Model

WRB 110S -8,0 -2,5

WRB 120S -8,0 -2,5

WRB 130S -8,0 -2,5

WRB 110M -8,0 -2,5

WRB 120M -8,0 -2,5

WRB 130M -8,0 -2,5

500 mm / 900 mm **

Typ/Model

WRB 210S -M2,5 -1,5

WRB 220S -M2,5 -1,5

WRB 230S -M2,5 -1,5

WRB 210M -M2,5 -1,5

WRB 220M -M2,5 -1,5

WRB 230M -M2,5 -1,5

1900 mm / 3600 mm **

Typ/Model

WRB 210S -M4 -2,5

WRB 220S -M4 -2,5

WRB 230S -M4 -2,5

WRB 210M -M4 -2,5

WRB 220M -M4 -2,5

WRB 230M -M4 -2,5

1900 mm

Typ/Model

WRB 210S -M6 -2,5

WRB 220S -M6 -2,5

WRB 230S -M6 -2,5

WRB 210M -M6 -2,5

WRB 220M -M6 -2,5

WRB 230M -M6 -2,5

1900 mm

Typ/Model

WRB 210P -5,6 -2,5

WRB 220P -5,6 -2,5

WRB 230P -5,6 -2,5

1900 mm

Typ/Model

WRB 210S -8,0 -2,5

WRB 220S -8,0 -2,5

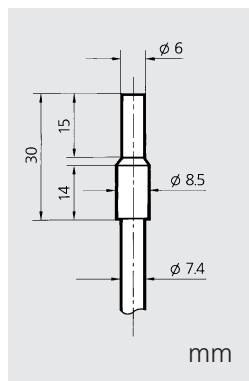
WRB 230S -8,0 -2,5

WRB 210M -8,0 -2,5

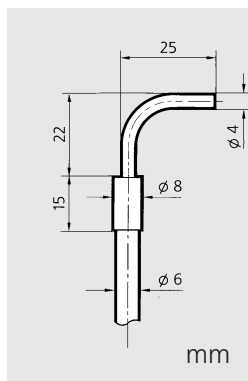
WRB 220M -8,0 -2,5

WRB 230M -8,0 -2,5

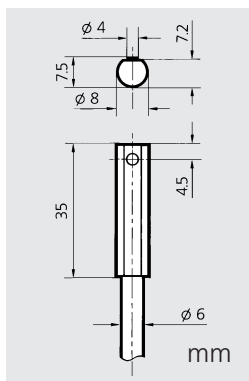
Ø 4,0



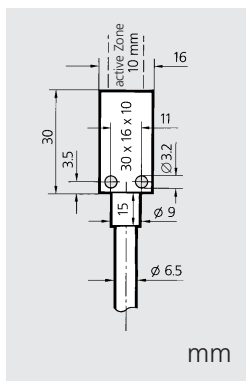
Ø 2,5



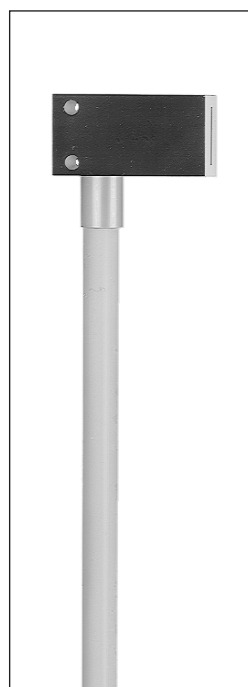
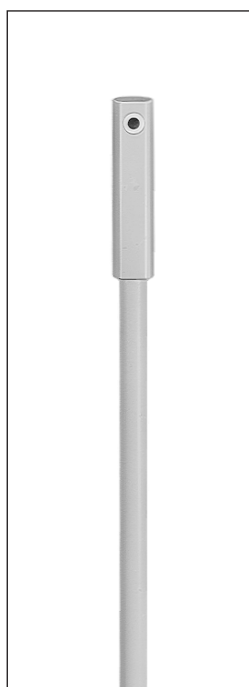
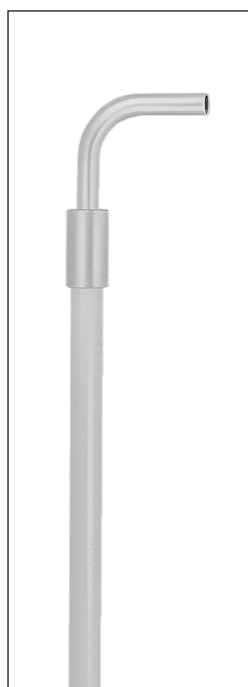
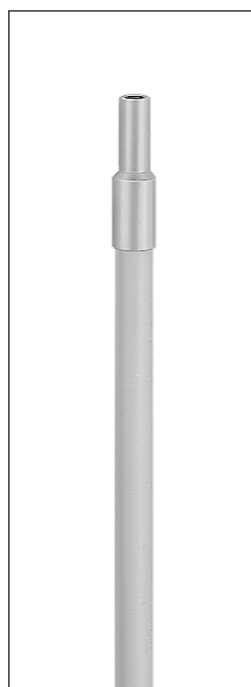
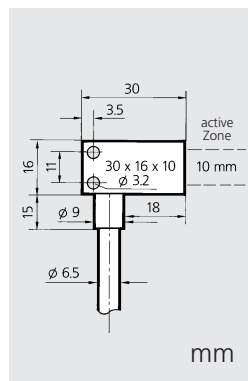
Ø 2,5



10 x 0,6 / 10 x 0,3



10 x 0,6 / 10 x 0,3



200 mm

120 mm

Typ/Model

WRB 110S -8,5 -4,0

WRB 120S -8,5 -4,0

WRB 130S -8,5 -4,0

WRB 110M -8,5 -4,0

WRB 120M -8,5 -4,0

WRB 130M -8,5 -4,0

140 mm

50 mm

Typ/Model

WRB 110S -90 -4,0 -2,5

WRB 120S -90 -4,0 -2,5

WRB 130S -90 -4,0 -2,5

WRB 110M -90 -4,0 -2,5

WRB 120M -90 -4,0 -2,5

WRB 130M -90 -4,0 -2,5

110 mm

45 mm

Typ/Model

WRB 110SR -8,0 -2,5

WRB 120SR -8,0 -2,5

WRB 130SR -8,0 -2,5

WRB 110MR -8,0 -2,5

WRB 120MR -8,0 -2,5

WRB 130MR -8,0 -2,5

160 mm

80 mm

Typ/Model

WRB 110SQ -10 -0,6

WRB 120SQ -10 -0,6

WRB 130SQ -10 -0,6

WRB 110MQ -10 -0,6

WRB 120MQ -10 -0,6

WRB 130MQ -10 -0,6

150 mm

80 mm

Typ/Model

WRB 110SQ -90 -10 -0,6

WRB 120SQ -90 -10 -0,6

WRB 130SQ -90 -10 -0,6

WRB 110MQ -90 -10 -0,6

WRB 120MQ -90 -10 -0,6

WRB 130MQ -90 -10 -0,6

2200 mm

Typ/Model

WRB 210S -8,5 -4,0

WRB 220S -8,5 -4,0

WRB 230S -8,5 -4,0

WRB 210M -8,5 -4,0

WRB 220M -8,5 -4,0

WRB 230M -8,5 -4,0

1800 mm

Typ/Model

WRB 210S -90 -4,0 -2,5

WRB 220S -90 -4,0 -2,5

WRB 230S -90 -4,0 -2,5

WRB 210M -90 -4,0 -2,5

WRB 220M -90 -4,0 -2,5

WRB 230M -90 -4,0 -2,5

1200 mm

Typ/Model

WRB 210SR -8,0 -2,5

WRB 220SR -8,0 -2,5

WRB 230SR -8,0 -2,5

WRB 210MR -8,0 -2,5

WRB 220MR -8,0 -2,5

WRB 230MR -8,0 -2,5

1400 mm

Typ/Model

WRB 210SQ -10 -0,3

WRB 220SQ -10 -0,3

WRB 230SQ -10 -0,3

WRB 210MQ -10 -0,3

WRB 220MQ -10 -0,3

WRB 230MQ -10 -0,3

1300 mm

Typ/Model

WRB 210SQ -90 -10 -0,3

WRB 220SQ -90 -10 -0,3

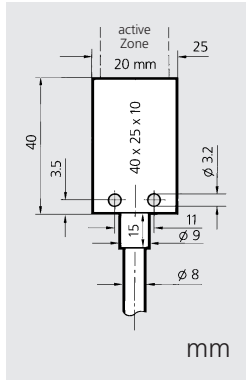
WRB 230SQ -90 -10 -0,3

WRB 210MQ -90 -10 -0,3

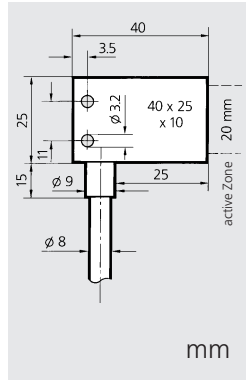
WRB 220MQ -90 -10 -0,3

WRB 230MQ -90 -10 -0,3

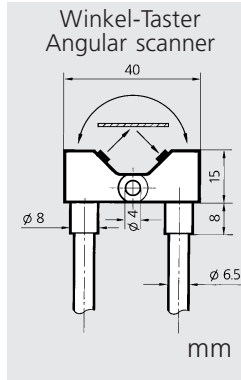
20 x 0,6 / 20 x 0,3



20 x 0,6 / 20 x 0,3

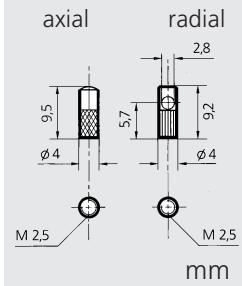


Ø 2,5

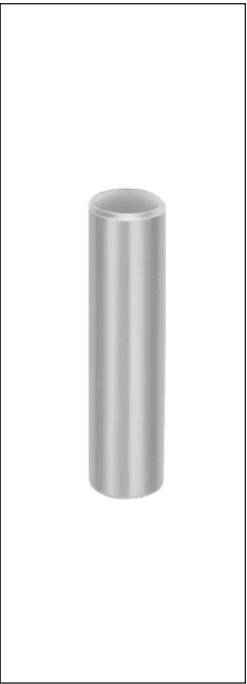
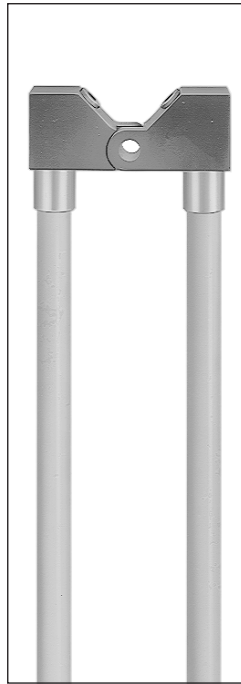
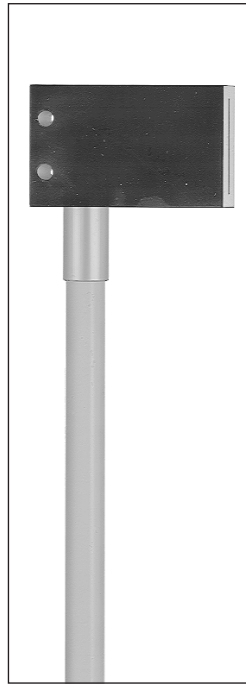
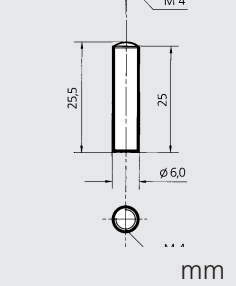


Zubehör

Vorsatzoptik M2,5
Auxiliary optic M2,5



Vorsatzoptik M4
Auxiliary optic M4



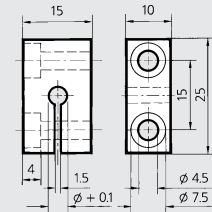
220 mm	200 mm	10 - 100 mm
110 mm	110 mm	10 - 100 mm
Typ/Model	Typ/Model	Typ/Model
WRB 110SQ -20 -0,6	WRB 110SQ -90 -20 -0,6	
WRB 120SQ -20 -0,6	WRB 120SQ -90 -20 -0,6	WRB 220 SW
WRB 130SQ -20 -0,6	WRB 130SQ -90 -20 -0,6	
WRB 110MQ -20 -0,6	WRB 110MQ -90 -20 -0,6	
WRB 120MQ -20 -0,6	WRB 120MQ -90 -20 -0,6	
WRB 130MQ -20 -0,6	WRB 130MQ -90 -20 -0,6	

1900 mm	1800 mm
Typ/Model	Typ/Model
WRB 210SQ -20 -0,3	WRB 210SQ -90 -20 -0,3
WRB 220SQ -20 -0,3	WRB 220SQ -90 -20 -0,3
WRB 230SQ -20 -0,3	WRB 230SQ -90 -20 -0,3
WRB 210MQ -20 -0,3	WRB 210MQ -90 -20 -0,3
WRB 220MQ -20 -0,3	WRB 220MQ -90 -20 -0,3
WRB 230MQ -20 -0,3	WRB 230MQ -90 -20 -0,3

Vorsatzoptiken für Einweg-Lichtschränken (1 Stück)
Auxiliary optics for through beam sensors (1 piece)

Typ/Model	Typ/Model	Typ/Model
VO M 2,5	VO M 2,5 - 90	VO M 4

Klemmbock/
Mounting



mm

Klemmbock für Lichtleitkabel (1 Stück)
Mounting for fibre-optic (1 piece)

Ø mm	Typ/Model
3,5	KB 3,5
5,0	KB 5
5,6	KB 5,6
6,5	KB 6,5
8,0	KB 8
8,5	KB 8,5