



















### BZ S 35 Dimensions



	BZ S 35-NX			
B1: Rail width	34			
J1: Rail height	79.5			
L3: Rail length max.	6 000			
L4: Spacing of fixing holes	40			
L5/L10: Position of first/last fixing hole	20			
m: Module	2.5			
α: Helix angle	19°31'42"			
Gew: Rail weight, specific (kg/m)	17.9			

### Available options for BZ S 35



### BM W 35 Dimensions and load capacities



	BM W 35-A	BM W 35-B	BM W 35-C	BM W 35-D	BM W 35-E	BM W 35-F	BM W 35-G
A: System height	98	98	105	105	105	98	98
B: Carriage width	100	100	70	70	76	70	70
B3: Distance between locating faces	67	67	52	52	55	52	52
C1: Position of center front lube hole	7	7	14	14	14	7	7
C3: Position of lateral lube hole	7	7	14	14	14	7	7
C4: Position of lateral lube hole	18.3	31.05	24.3	26.05	24.3	24.3	26.05
C7: Position of top lube hole	15.8	28.55	21.8	23.55	21.8	21.8	23.55
J: Carriage height	41	41	48	48	48	41	41
L: Carriage length	111.6	137.1	111.6	137.1	111.6	111.6	137.1
L1: Exterior fixing hole spacing	62	62	50	72	50	50	72
L2: Interior fixing hole spacing	52	52	-	-	50	-	-
L6: Steel body length	79.6	105.1	79.6	105.1	79.6	79.6	105.1
N: Lateral fixing hole spacing	82	82	50	50	-	50	50
O: Reference face height	8	8	15	15	22	8	8

### Capacities and weights

C0: static load capacity (Nm)	84 400	110 300	84 400	110 300	84 400	84 400	110 300
C100: dynamic load capacity (Nm)	38 700	46 700	38 700	46 700	38 700	38 700	46 700
MOQ: static cross moment capacity (Nm)	1 566	2 048	1 566	2 048	1 566	1 566	2 048
MOL: static longitudinal moment capacity (Nm)	1 252	2 104	1 252	2 104	1 252	1 252	2 104
MQ: dynamic cross moment capacity (Nm)	718	867	718	867	718	718	867
ML: dynamic longitudinal moment capacity (Nm)	574	891	574	891	574	574	891
Gew: Carriage weight (kg)	1.8	2.3	1.7	2.2	1.9	1.4	1.8

### Available options for BM W 35



## 5.3

## MONORAIL BZ

## Accessories

## BZ Rail accessories – overview

Accessories	BZ S 25	BZ S 35			
<b>Plugs:</b>					
Plastic plugs	BRK 25	BRK 35			
<b>Pinions:</b>					
Pinion with through bore	BZR 25-...	BZR 35-...			
Pinion with through bore and keyway	BZR 25-...-K	BZR 35-...-K			
Pinion with shaft	BZR 25-S-...	BZR 35-S-...			
Pinion with shaft and keyway	BZR 25-S-...-K	BZR 35-S-...-K			
<b>Others:</b>					
Lubricating pinion	BZR 25-L-...	BZR 35-L-...			
Pinion hub for lubricating pinion	BZR 25-LN	BZR 35-LN			
Assembly fixture for BZ systems	BZM 25-.....	BZM 35-.....			

## BM Carriage accessories – overview

Accessories	BM W 25	BM W 35			
<b>Additional wipers:</b>					
Additional wiper NBR	ZBN 25-U	ZBN 35-U			
Additional wiper Viton	ZBV 25-U	ZBV 35-U			
Metal wiper	ABM 25	ABM 35			
<b>Bellows:</b>					
Bellows	FBB 25	FBB 35			
Adapter plate for bellows (spare part)	ZPB 25	ZPB 35			
End plate for bellows (spare part)	EPB 25	EPB 35			
<b>Assembly rails:</b>					
Assembly rail	MBM 25	MBM 35			
<b>Lubrication plates:</b>					
Lubrication plate	SPL 25-BM	SPL 35-BM			
<b>Front plates:</b>					
Cross wiper for front plate (spare part)	QAS 25-STB	QAS 35-STB			
<b>Lube nipples:</b>					
Hydraulic-type grease nipple straight	SN 6	SN 6			
Hydraulic-type grease nipple 45°	SN 6-45	SN 6-45			
Hydraulic-type grease nipple 90°	SN 6-90	SN 6-90			
Flush type grease nipple M3	-	-			
Flush type grease nipple M6	SN 6-T	SN 6-T			
Grease gun for SN 3-T and SN 6-T	SFP-T3	SFP-T3			
<b>Lube adapters:</b>					
Straight screw-in connection M3	-	-			
Lubrication adapter M8 round-head	SA 6-RD-M8	SA 6-RD-M8			
Lubrication adapter M8 hexagon head	-	SA 6-6KT-M8			
Lubrication adapter G1/8 hexagon head	-	SA 6-6KT-G1/8			
Swivel screw connection for pipe d=4 mm	SV 6-D4	SV 6-D4			
Swivel screw connection M6	SV 6-M6	SV 6-M6			
Swivel screw connection M6 long	SV 6-M6-L	SV 6-M6-L			
Swivel screw connection M8	SV 6-M8	SV 6-M8			
Swivel screw connection M8 long	SV 6-M8-L	SV 6-M8-L			

**BZ Rail accessories – details**



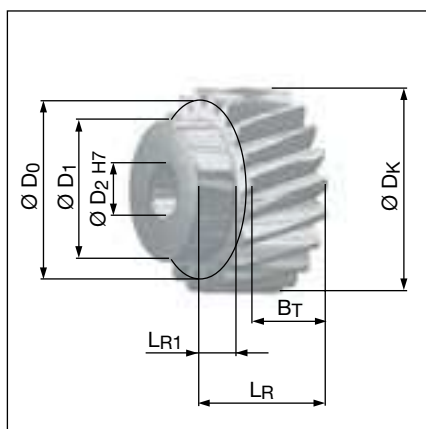
**Plastic plugs**

If required, the attachment holes on the sides of BZ rails can be closed with BRK plastic plugs. However, this is not essential as the holes are located outside the carriage's area of movement.

Scope of supply: Pack of 25 pcs

Order code: **BRK xx**

xx = Size, Sample order: 3 x BRK 25 (75 pcs)



**Pinion with through hole**

The pinion has hardened and ground helical teeth in quality 6. The hole is soft and can be machined by customers to suit their individual requirements.

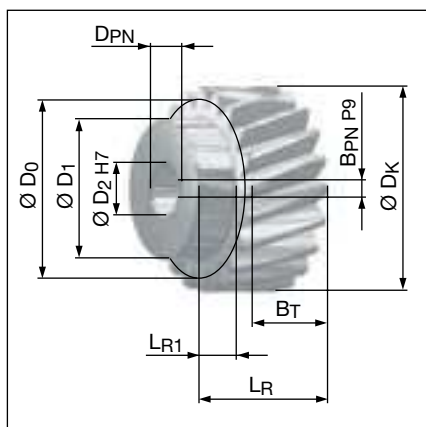
This pinion is also available with a keyway (see next paragraph).

For dimensions, please refer to the BZR xx columns in the table of dimensions.

Order code:

Size 25: **BZR 25-2.0-20-S6**

Size 35: **BZR 35-2.5-20-S6**



**Pinion with through hole and keyway**

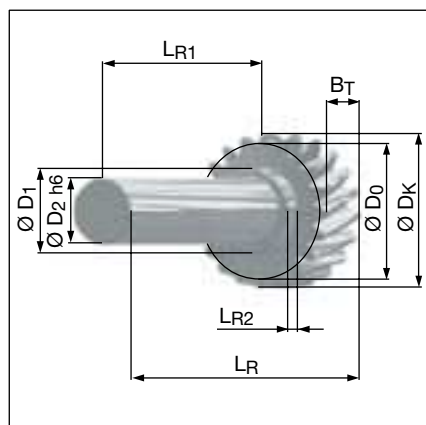
This pinion is similar to the pinion with a through hole but also has a keyway to specification DIN 6885-A to facilitate its attachment to a drive shaft.

For dimensions, please refer to the BZR xx-K columns in the table of dimensions.

Order code:

Size 25: **BZR 25-2.0-20-S6-K**

Size 35: **BZR 35-2.5-20-S6-K**



**Pinion with shaft**

This pinion with hardened and ground helical teeth in quality 6 has a plain shaft. This is left unhardened to permit subsequent machining.

This pinion is also available with a keyway (see next paragraph).

For dimensions, please refer to the BZR xx-S columns in the table of dimensions.

Order code:

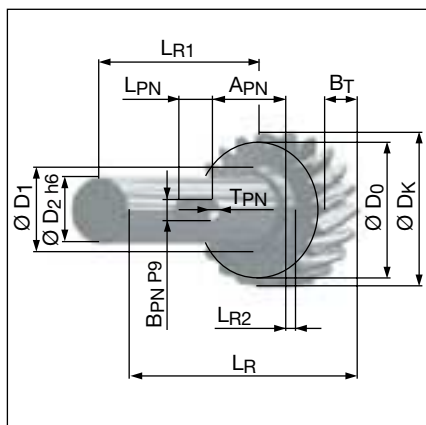
Size 25: **BZR 25-S-2.0-20-S6**

Size 35: **BZR 35-S-2.5-20-S6**

### 5.3

#### MONORAIL BZ

#### Accessories



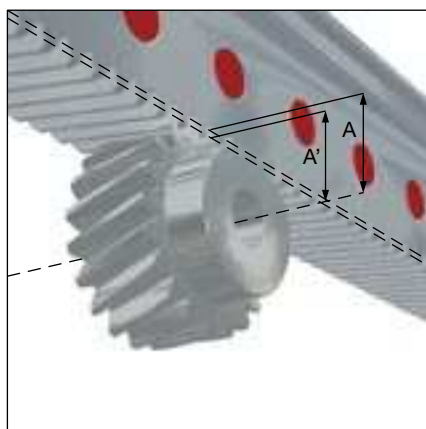
#### Pinion with shaft and keyway

This pinion is similar to the pinion with a shaft, but also has a keyway to specification DIN 6885-A.  
for attachment For dimensions, please refer to the BZR xx-S-K columns in the table of dimensions.

Order code:

Size 25: **BZR 25-S-2.0-20-S6-K**

Size 35: **BZR 35-S-2.5-20-S6-K**



#### Measure A and A'

#### Dimension table pinions

	BZR 25	BZR 35	BZR 25-K	BZR 35-K	BZR 25-S	BZR 35-S	BZR 25-S-K	BZR 35-S-K
z: Number of teeth	20	20	20	20	20	20	20	20
m: Module	2.0	2.5	2.0	2.5	2.0	2.5	2.0	2.5
$\alpha$ : Helix angle	19°31'42"	19°31'42"	19°31'42"	19°31'42"	19°31'42"	19°31'42"	19°31'42"	19°31'42"
A: Distance axis - reference circle	21.22	26.53	21.22	26.53	21.22	26.53	21.22	26.53
A': Distance axis - tooth crest of rack	19.22	24.03	19.22	24.03	19.22	24.03	19.22	24.03
BT: Tooth width	20	25	20	25	20	25	20	25
DK: Outside diameter	46.44	58.05	46.44	58.05	46.44	58.05	46.44	58.05
D0: Reference diameter	42.44	53.05	42.44	53.05	42.44	53.05	42.44	53.05
D1: Shoulder diameter	35	40	35	40	32	32	32	32
D2: Bore / shaft diameter	15	15	15	15	25	25	25	25
LR: Total length	30	37	30	37	140	145	140	145
LR1: Shaft length	10	12	10	12	120	120	120	120
LR2: Shoulder length	-	-	-	-	8	8	8	8
APN: Keyway distance	-	-	-	-	-	-	43.5	43.5
BPN: Keyway width	-	-	5	5	-	-	8	8
DPN: Diameter of bore with keyway	-	-	17.3	17.3	-	-	-	-
LPN: Keyway length	-	-	-	-	-	-	25	25
TPN: Keyway depth	-	-	-	-	-	-	4	4



#### Lubricating pinion

Felt lubricating pinions are available to lubricate the racks. These can be supplied with oil either manually or with an automatic lubrication system.

Order code:

Size 25: **BZR 25-L-2.0-16-S**

Size 35: **BZR 35-L-2.5-16-S**



#### Pinion hub for lubricating pinion

Pinion hubs are used in combination with lubricating pinions. Lubricating oil can be fed through the hub to the felt pinion through via a special arrangement of lubricating channels.

Order code:

Size 25: **BZR 25-LN**

Size 35: **BZR 35-LN**



#### Assembly fixture for BZ systems

An assembly fixture is available for the alignment of butt-jointed BZ rails. It consists of a rack segment designed to match BZ teeth. During assembly, the segment is inserted into the racks on both sides of the butt joint which connects and aligns them precisely.

Order code:

Size 25: **BZM 25-2.0-7-S5**

Size 35: **BZM 35-2.5-6-S5**

## 5.4

### MONORAIL BZ

#### Order code

Individual guide rails and carriages are ordered in accordance with the order codes described below.

All MONORAIL BM carriages can be used with BZ rails.

Q.v. chapter 2.1, chapter 4.3 and 5.3 for the order key for accessories.

Separate order codes are used in each case for rails, carriages and accessories. This also applies to different versions of rails and carriages.

All guide components are supplied individually as standard, i.e. unassembled.

If required, SCHNEEBERGER can also supply rails and carriages assembled incl. accessories as complete systems. Please note the ordering instructions in chapter 2.4 if this applies.

#### Order code for BZ rails

	2x	BZ S	25	-Q6S	-R1	-960	-15	-15	-CN
Quantity									
Rail									
Size									
Toothing quality									
Reference side									
Rail length L3									
Position of first fixing hole L5									
Position of last fixing hole L10									
Coating									

#### NB

Q.v. chapter 5.1 to 5.3 for an overview of types, details of shapes, available options and accessories.

Q.v. chapter 2 for a description of the options.

If possible, standard lengths are preferred for L3 rail length.

These are calculated with the table values in chapter 5.2 using the following formula:  $L3 = n \times L4 + L5 + L10 \leq L3_{max}$ .

#### Order code for BM carriages

	4x	BM W	25	-A	-G3	-V1	-R1	-CN	-S10	-LN
Quantity										
Carriage										
Size										
Type										
Accuracy										
Preload										
Reference side										
Coating										
Lube connection										
Lubrication as delivered condition										

#### NB

Q.v. chapter 5.1 to 5.3 for an overview of types, details of shapes, available options and accessories.

Q.v. chapter 2 for a description of the options.