



Cordless Working

[Back](#)



Impressive technology – the lithium-ion batteries

► **No memory effect:**

Convenient charging – regardless of whether the battery is $\frac{3}{4}$ or $\frac{1}{2}$ empty

► **Low self-discharge:**

After 30 days the lithium-ion battery still has 96% of the specified rated capacity, whereas a NiCd/NiMH battery loses approx. 25% of the rated capacity

► **ECP (Electronic Cell Protection) in the cordless tools:**

The cells in the battery are monitored electronically. The power output of the tool is automatically reduced in the following cases:

- Overload
- Deep discharge
- Overheating

All three criteria can damage the cell and significantly influence the lifetime of the battery

► **HCH (Heat Conductive Housing) and cooling fins:**

Allow for optimum heat emission from the inside of the battery. The Bosch Li-Ion battery cools down 45% faster than conventional battery models

► **Protective ribs and rubber caps fitted on the side:**

Protect the battery against external impacts

► **Charge level indicator:**

Tells the user how much more energy is available



When the “on” button is pressed, the charging state of the battery is displayed for 5 seconds by the LEDs.

Red LED: If the red LED lights up, the battery is too hot or too cold to be charged.

Green LED: Displays the charging state.

Permanently lit LEDs indicate the following:

- | | |
|-----------------|--------------------------------|
| 3 LEDs: | Charging state between 100-66% |
| 2 LEDs: | Charging state between 66-33% |
| 1 LED: | Charging state between 33-5% |
| 1 LED flashing: | Charging state under 5% |

No LED lit: Battery is defective.

During charging: 3 LEDs flashing.

Charging completed: All LEDs light up for 15 minutes.



Differences in the handling of battery technologies

Comparison	NiCd	NiMH	Li-Ion
Self-discharge per month	20%	25%	3-5%
Classic memory effect	Yes	No	No
Lazy battery effect	Yes	Yes	No
Ability to function at frost temperatures	At -18°C, still 40% capacity = still functional	At -15°C, 0% capacity = no longer functional	At -20°C, still 50% capacity = functional
Storage at frost temperatures	to -20°C without damage	to -20°C without damage	to -20°C without damage
Storage time without recharging, used battery	up to 6 months	up to 6 months	up to 24 months
Optimum storage temperature	5-15°C	5-15°C	5-15°C
Battery protection ECP	No	No	Yes

Lifetime can be influenced by the end user

	Use	Lifetime of battery pack
Selection of power tool and battery	suitable for the application	●
	too weak	○
Load on the battery as a result of the various applications (applies only to NiCd and NiMH)	screwdriving/drilling small diameters	●
	sawing/hammer drilling large diameters	○
Charging process (memory effect) (applies to NiCd and NiMH)	complete discharging/charging	●
	partial discharging/charging	○
Mechanical load	normal treatment	●
	rough treatment	○

● high ○ low

Lifetime cannot be influenced by the end user

	Effect
Ageing	Every battery ages with time, regardless of whether it is in use or not. This results in loss of voltage and capacity.
Chemical process	All materials suffer corrosion with time and use. This results in loss of voltage and capacity.
Electrolyte drying out	The electrolyte loses moisture with time and use. This results in loss of voltage and capacity.



Batteries

for Bosch cordless tools

The right solution for every user

Three levels of battery quality from Bosch.	
▶ DIY = Do it yourself	▶ For occasional work around the house
▶ SD = Standard Duty	▶ For light screwdriving and drilling work by professionals
▶ HD = Heavy Duty	▶ For regular, professional work that requires power and capacity

Battery packs 3.6 V

Product properties				Ordering information						
Application	Battery capacity Ah	Cell technology	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat	



3.6 V straight-shape battery pack with ECP (Electronic Cell Protection)
Appropriate for GSR ProDrive

SD	1.3	Li-Ion	2 607 336 242	C1a	1	1	508971	GBC	22.74
-----------	-----	--------	----------------------	-----	---	---	--------	-----	-------



3.6 V straight-shape battery pack
Appropriate for PSR 3,6 V; PTK 3,6 V as of 6/05

DIY	1.2	NiCd	2 607 335 790	C1a	1	1	403696	GBC	21.34
------------	-----	------	----------------------	-----	---	---	--------	-----	-------



3.6 V straight-shape battery pack
Appropriate for PSR 3,6 V as of 6/02

DIY	1.2	NiCd	2 607 335 484	C1a	1	1	292832	GBC	19.45
------------	-----	------	----------------------	-----	---	---	--------	-----	-------



3.6 V straight-shape battery pack
Appropriate for PSR 3,6 V before 6/02

DIY	1.2	NiCd	2 607 335 062	C1a	1	1	076593	GBC	15.37
------------	-----	------	----------------------	-----	---	---	--------	-----	-------

Battery packs 7.2 V

Application	Battery capacity Ah	Cell technology	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Product properties			Ordering information						

7.2 V straight-shape battery pack
Appropriate for GWB 7,2 V Professional

SD	2.0	NiCd	2 607 335 175	C1a	1	1	116770	GBC	39.88
----	-----	------	---------------	-----	---	---	--------	-----	-------



7.2 V flat-shape battery pack
 Second generation of tools
Appropriate for GBM 7,2 V; GDR 7,2 V; GSR 7,2 V Professional; PSR 7,2 V

SD	1.5	NiCd	2 607 335 033	C1a	1	1	058100	GBC	38.63
----	-----	------	---------------	-----	---	---	--------	-----	-------



7.2 V bulb-shape battery pack
 First generation of tools
Appropriate for GBM 7,2 V; GSR 7,2 V; GWS 7,2 V Professional; PSR 7,2 V

SD	1.5	NiCd	2 607 300 001	C1a	1	1	006675	GBC	44.13
----	-----	------	---------------	-----	---	---	--------	-----	-------

Battery packs 9.6 V



9.6 V pod style battery pack

DIY	1.2	NiCd	2 607 335 524	C1a	1	1	308144	GBC	20.97
SD	1.5	NiCd	2 607 335 540	C1a	1	1	309363	GBC	33.54



9.6 V pod style battery pack

HD	2.6	NiMH	2 607 335 682	C1a	1	1	334655	GBC	59.70
----	-----	------	---------------	-----	---	---	--------	-----	-------

9.6 V presentation dummy (pod style battery pack)

-	-	-	2 607 001 380	P0b	1	1	246354	GAT	4.54
---	---	---	---------------	-----	---	---	--------	-----	------



9.6 V flat-shape battery pack
Appropriate for GBM 9,6 V; GDR 9,6 V; GSB 9,6 V; GSR 9,6 V Professional; PDR 9,6 V; PSR 9,6 V; PSB 9,6 V

SD	1.5	NiCd	2 607 335 037	C1a	1	1	074131	GBC	37.77
----	-----	------	---------------	-----	---	---	--------	-----	-------



9.6 V bulb-shape battery pack
 First generation of tools
Appropriate for GBM 9,6 V; GSB 9,6 V; GSC 9,6 V; GSR 9,6 V; GUS 9,6 V Professional; PSR 9,6 V; PSB 9,6 V

SD	1.5	NiCd	2 607 300 002	C1a	1	1	018975	GBC	53.40
----	-----	------	---------------	-----	---	---	--------	-----	-------

Battery packs 10.8 V



10.8 V straight-shape battery pack with ECP (Electronic Cell Protection)

DIY	1.3	Li-Ion	2 607 336 864	C1a	1	1	601962	GBC	32.10
SD	1.3	Li-Ion	2 607 336 014	C1a	1	1	379441	GBC	35.96

10.8 V presentation dummy

-	-	-	2 607 336 996	P0b	1	1	522021	GAT	22.70
---	---	---	---------------	-----	---	---	--------	-----	-------



Battery packs 12 V



Application	Battery capacity Ah	Cell technology	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Product properties			Ordering information						

12 V pod style battery pack

DIY	1.2	NiCd	2 607 335 526	C1a	1	1	308151	GBC	26.43
SD	1.5	NiCd	2 607 335 542	C1a	1	1	309370	GBC	39.59



12 V pod style battery pack

HD	2.4	NiCd	2 607 335 676	C1a	1	1	334624	GBC	64.89
HD	2.6	NiMH	2 607 335 684	C1a	1	1	334662	GBC	70.03
HD	3.0	NiMH	2 607 335 692	C1a	1	1	334693	GBC	81.07

12 V presentation dummy (pod style battery pack)

-	-	-	2 607 001 381	P0b	1	1	246361	GAT	4.54
---	---	---	----------------------	-----	---	---	--------	-----	------



12 V flat-shape battery pack

Appropriate for GBM 12 V; GDR 12 V; GSR 12 V Professional; PDR 12 V; PSR 12 V

SD	1.5	NiCd	2 607 335 055	C1a	1	1	080248	GBC	43.27
SD	2.0	NiCd	2 607 335 151	C1a	1	1	113373	GBC	74.59
SD	2.6	NiMH	2 607 335 250	C1a	1	1	184915	GBC	112.32



12 V bulb-shape battery pack

First generation of tools

Appropriate for GBM 12 V; GSR 12 V Professional

SD	1.5	NiCd	2 607 335 021	C1a	1	1	041768	GBC	64.96
-----------	-----	------	----------------------	-----	---	---	--------	-----	-------

Battery packs 14.4 V



14.4 V slide-in battery pack with ECP (Electronic Cell Protection)

DIY	1.3	Li-Ion	2 607 336 038	C1a	1	1	438711	GBC	43.65
DIY	1.5	Li-Ion	2 607 336 206	C1a	1	1	534079	GBC	58.36

14.4 V presentation dummy

-	-	-	2 607 336 997	P0b	1	1	522052	GAT	22.70
---	---	---	----------------------	-----	---	---	--------	-----	-------



14.4 V slide-in battery pack with ECP (Electronic Cell Protection)

SD	1.3	Li-Ion	2 607 336 150	C1a	1	1	522960	GBC	79.59
HD	2.6	Li-Ion	2 607 336 078	C1a	1	1	480888	GBC	86.50



14.4 V slide-in battery pack with CLI (Charge Level Indicator)

HD	3.0	Li-Ion	2 607 336 224	C1a	1	1	546164	GBC	133.73
-----------	-----	--------	----------------------	-----	---	---	--------	-----	--------



14.4 V pod style battery pack

DIY	1.2	NiCd	2 607 335 528	C1a	1	1	308168	GBC	33.28
SD	1.5	NiCd	2 607 335 534	C1a	1	1	308199	GBC	46.71

Battery packs 14.4 V

Application	Battery capacity Ah	Cell technology	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Product properties			Ordering information						



14.4 V pod style battery pack

HD	2.4	NiCd	2 607 335 678	C1a	1	1	334631	GBC	79.23
HD	2.6	NiMH	2 607 335 686	C1a	1	1	334679	GBC	85.76
HD	3.0	NiMH	2 607 335 694	C1a	1	1	334709	GBC	98.97

14.4 V presentation dummy (pod style battery pack)

-	-	-	2 607 001 382	P0b	1	1	246378	GAT	5.20
---	---	---	----------------------	-----	---	---	--------	-----	------



14.4 V flat-shape battery pack

Appropriate for GSB 14,4 V; GSR 14,4 V Professional; PSR 14,4 V

SD	1.5	NiCd	2 607 335 160	C1a	1	1	115278	GBC	50.08
SD	2.0	NiCd	2 607 335 210	C1a	1	1	142700	GBC	85.04
SD	2.6	NiMH	2 607 335 252	C1a	1	1	184922	GBC	126.09

Battery packs 18 V



18 V slide-in battery pack with ECP (Electronic Cell Protection)

DIY	1.3	Li-Ion	2 607 336 040	C1a	1	1	438728	GBC	51.90
DIY	1.5	Li-Ion	2 607 336 208	C1a	1	1	534086	GBC	68.86



18 V slide-in battery pack with ECP (Electronic Cell Protection)

SD	1.3	Li-Ion	2 607 336 170	C1a	1	1	522977	GBC	93.24
-----------	-----	--------	----------------------	-----	---	---	--------	-----	-------



18 V slide-in battery pack with ECP (Electronic Cell Protection)

HD	2.6	Li-Ion	2 607 336 092	C1a	1	1	480895	GBC	105.37
-----------	-----	--------	----------------------	-----	---	---	--------	-----	--------



18 V slide-in battery pack with CLI (Charge Level Indicator)

HD	3.0	Li-Ion	2 607 336 236	C1a	1	1	546171	GBC	158.05
-----------	-----	--------	----------------------	-----	---	---	--------	-----	--------

18 V presentation dummy

-	-	-	2 607 336 998	P0b	1	1	522038	GAT	22.70
---	---	---	----------------------	-----	---	---	--------	-----	-------



18 V pod style battery pack

SD	1.5	NiCd	2 607 335 536	C1a	1	1	308205	GBC	55.11
-----------	-----	------	----------------------	-----	---	---	--------	-----	-------



18 V pod style battery pack

HD	2.6	NiMH	2 607 335 688	C1a	1	1	334686	GBC	115.65
-----------	-----	------	----------------------	-----	---	---	--------	-----	--------



18 V presentation dummy (pod style battery pack)

-	-	-	2 607 001 383	P0b	1	1	246385	GAT	5.20
---	---	---	----------------------	-----	---	---	--------	-----	------



Battery packs 24 V



Application	Battery capacity Ah	Cell technology	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Product properties			Ordering information						

24 V pod style battery pack
Cannot be used for GBH 24 V

SD	1.5	NiCd	2 607 335 538	C1a	1	1	308212	GBC	65.02
-----------	-----	------	----------------------	-----	---	---	--------	-----	-------



24 V pod style battery pack
Can be used for all pod style battery pack cordless tools

HD	2.4	NiCd	2 607 335 448	C1a	1	1	281387	GBC	126.20
HD	2.6	NiMH	2 607 335 562	C1a	1	1	316118	GBC	128.59
HD	3.0	NiMH	2 607 335 510	C1a	1	1	297189	GBC	149.25

24 V presentation dummy (pod style battery pack)

-	-	-	2 607 001 384	P0b	1	1	246392	GAT	5.20
---	---	---	----------------------	-----	---	---	--------	-----	------



24 V slide-in battery pack
with charge level indicator
Appropriate for GBH 24 VRE Professional

HD	1.7	NiCd	2 607 335 082	C1a	1	1	100571	GBC	124.95
HD	3.0	NiCd	2 607 335 216	C1a	1	1	146555	GBC	183.99

Battery packs 36 V



36 V slide-in battery pack with ECP (Electronic Cell Protection)
and CLI (Charge Level Indicator)

HD	1.3	Li-Ion	2 607 336 002	C1a	1	1	365352	GBC	109.11
-----------	-----	--------	----------------------	-----	---	---	--------	-----	--------



36 V slide-in battery pack with ECP (Electronic Cell Protection)
and CLI (Charge Level Indicator)

HD	2.6	Li-Ion	2 607 336 108	C1a	1	1	451437	GBC	168.26
-----------	-----	--------	----------------------	-----	---	---	--------	-----	--------

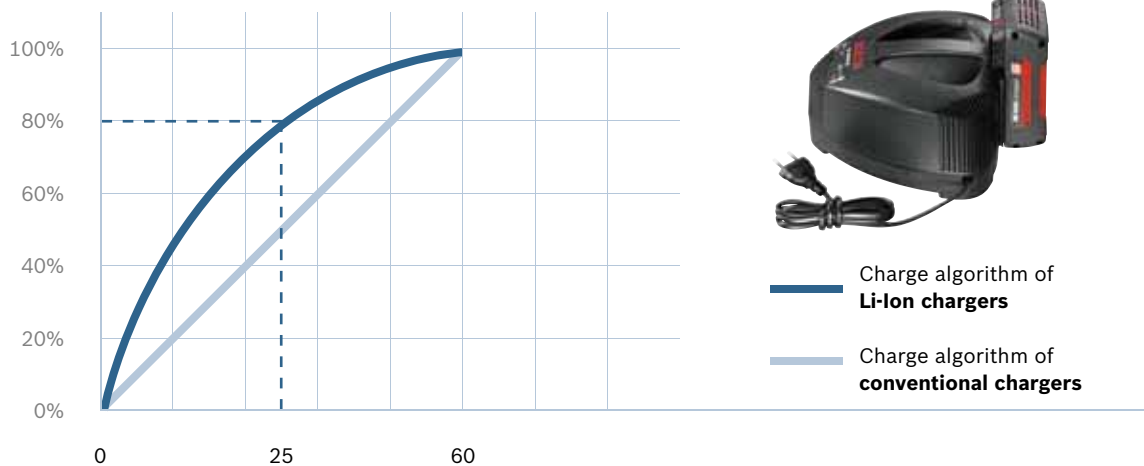
36 V presentation dummy

-	-	-	2 607 336 999	P0b	1	1	522045	GAT	22.70
---	---	---	----------------------	-----	---	---	--------	-----	-------



Lithium-ion chargers
























































The charger with turbo charge has an asymptotic charge algorithm, which recharges the battery to 80% in 25 minutes. Since the lithium-ion batteries have no memory effect, the battery can be recharged at any time and in any charge status.



Since the battery heats up to 70°C in the application, the air cooling system built into the charger blows fresh air through the battery. This reduces the charge time considerably because the battery is only charged at temperatures between 0 and 45°C, in order to guarantee a long lifetime of the battery.
















Overview of Bosch battery packs and chargers

Cell technology	Battery voltage	3.6 V	10.8 V	14.4 V	18.0 V	36.0 V		
Li-Ion	Battery capacity	Battery packs (Part number 2 607...)						
	1.3 Ah	 336 242	 336 014	 336 038	 336 040			
				 336 150	 336 170			
						 336 002		
	1.5 Ah			 336 206	 336 208			
	2.6 Ah			 336 078	 336 092			
						 336 108		
	3.0 Ah			 336 224	 336 236			
NiCd	Battery capacity	Battery packs (Part number 2 607...)						
	1.2 Ah	 335 062						
		 335 484						
		 335 790						
			 335 524	 335 526	 335 528			
	1.5 Ah	 300 001	 300 002	 335 021				
		 335 033	 335 037	 335 055	 335 160			
			 335 540	 335 542	 335 534	 335 536	 335 538	
	1.7 Ah						 335 082	
	2.0 Ah	 335 175	 335 152	 335 151	 335 210			
			 335 262	 335 264	 335 266			
2.4 Ah			 335 676	 335 678			 335 448	
3.0 Ah							 335 216	
NiMH	2.6 Ah		 335 230	 335 250	 335 252			
			 335 682	 335 684	 335 686	 335 688	 335 562	
	3.0 Ah			 335 692	 335 694		 335 510	

¹ Charging only possible with intermediate adapter.



AL 1115 CV  225 514		AL 1130 CV  225 134		AL 1820 CV  225 424		AL 1860 CV  225 322		AL 2204 CV  225 274		AL 2215 CV  225 472		AL 3640 CV  225 100		Chargers (Part number 2 607...)
Charge times (mins) ²													Battery capacity	
55													1.3 Ah	
55	30													
								180	55					
			45	24								45		
								207	63				1.5 Ah	
			80	30									2.6 Ah	
												68		
			95	35									3.0 Ah	
 224 902		 224 790		AL 2404  225 184		AL 2422 DC  224 410		AL 2425 DV  224 426		AL 2450 DV  225 028		Chargers (Part number 2 607...)		
Charge times (mins) ²													Battery capacity	
240													1.2 Ah	
			300											
					200	38	36	15						
					250	47	44	19					1.5 Ah	
						53	50	22					1.7 Ah	
					333	62	58	27					2.0 Ah	
					400	74	70	30					2.4 Ah	
						93	87	38					3.0 Ah	
					433	80	76	33					2.6 Ah	
					500	93	90	38					3.0 Ah	

² The charge times listed in minutes are approximate specifications, measured at a room temperature of 20°C/68°F. Charging state, age and temperature of the battery influence the charge times considerably.



Chargers for Bosch batteries



The charger AL 2404 charges all batteries with APT insertion end from 7.2 to 24 V. An LED display indicates the operational state of the charger and the charging state of the battery.



The charger AL 60 DC 2422 is specially designed for use in cars/trucks (12/24 V). With Delta Voltage charge current shutdown. Operation via direct current source (cigarette lighter).



The charger AL 2450 DV for all Bosch batteries. Quick charger with Delta Voltage charging control and an audible signal to indicate that the battery is fully charged.



The charger AL 3640 CV for all 36 V Li-Ion battery packs from Bosch. A special charging process allows for 80% of the battery capacity to be charged within 25 minutes.

Singlevolt chargers 2.4 V NiCd



Product properties		Ordering information							
Charge current A	Input voltage(s) V	Country version	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Standard charger for PSR 2,4 V, as of 06/2002									
0.2	230	UK	2 607 224 788	C0a	1	1	292801	GBC	8.74

Singlevolt chargers 3.6 V NiCd



Standard charger for PSR 3,6 V and PTK 3,6 V, as of 06/2002									
0.2	230	UK	2 607 224 792	C0a	1	1	292825	GBC	14.92

Singlevolt chargers 10.8 V Li-Ion



Product properties			Ordering information						
Charge current A	Input voltage(s) V	Country version	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Li-Ion quick charger AL 1130 CV									
3	230	UK	2 607 225 136	C0a	1	1	380447	GBC	29.72

Singlevolt chargers 36 V Li-Ion



Li-Ion quick charger AL 3640 CV									
4	230	UK	2 607 225 102	C0a	1	1	365499	GBC	62.93

Multivolt chargers 3.6 - 10.8 V Li-Ion



Li-Ion standard charger AL 1115 CV									
1.5	230	UK	2 607 225 516	C0a	1	1	522472	GBC	32.98

Multivolt chargers 7.2 - 24 V NiCd / NiMH



Standard charger AL 2404 (does not charge 2 607 335 082 and 2 607 335 216)									
0.4	230	UK	2 607 225 186	C0a	1	1	425889	GBC	10.23



Car charger AL 2422 DC									
2.2	12 - 24	EU/UK	2 607 224 410	C1a	1	1	204859	GBC	69.60



Standard charger AL 2425 DV									
2.5	230	UK	2 607 224 428	C0a	1	1	204668	GBC	43.65



Multivolt chargers 7.2 - 24 V NiCd / NiMH



Charge current A	Input voltage(s) V	Country version	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat
Product properties			Ordering information						

Quick charger AL 2450 DV

5.0	230	UK	2 607 225 030	C1a	1	1	357067	GBC	49.55
-----	-----	----	---------------	-----	---	---	--------	-----	-------

Multivolt chargers 14.4 - 18 V Li-Ion



Quick charger AL 1820 CV

2.0	230	UK	2 607 225 426	C0a	1	1	522991	GBC	48.89
-----	-----	----	---------------	-----	---	---	--------	-----	-------



Quick charger AL 1860 CV

6.0	230	UK	2 607 225 324	C0a	1	1	480871	GBC	48.59
-----	-----	----	---------------	-----	---	---	--------	-----	-------



Standard charger AL 2204 CV

0.4	230	UK	2 607 225 276	C0a	1	1	438742	GBC	21.85
-----	-----	----	---------------	-----	---	---	--------	-----	-------

Intermediate adapter for battery chargers

► Used to charge bulb-shape batteries and flat-shape batteries without APT insertion end



Product properties	Ordering information
	Part number
	Packaging type
	Pack quantity
	Minimum order quantity
	Barcode 3165140...
	Discount group
	List Price ex vat

Adapter for chargers AL 60 DV 1411 / 1419 / 2411 / 2422 / 2425, AL 30 DV 1450 / 2450 and AL 2498 FC

	2 607 000 198	C0a	1	1	109239	GBC	9.29
--	---------------	-----	---	---	--------	-----	------

Accessories for Bosch Cordless Worklights GLI Professional, PLI



Product properties		Ordering information						
Voltage(s) V	Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat	
Bulb								
9.6	2 609 200 305	C1d	1	1	239554	GAT	2.41	
12.0	2 609 200 306	C1d	1	1	239561	GAT	2.41	
14.4								
18.0	2 609 200 307	C1d	1	1	239578	GAT	3.76	
24.0	2 609 200 308	C1d	1	1	239585	GAT	3.76	
Lens with setting ring								
-	2 609 200 309	P1d	1	1	239592	GAT	2.67	

Accessories set for Bosch Pneumatic Pump PAG



Product properties		Ordering information						
Part number	Packaging type	Pack quantity	Minimum order quantity	Barcode 3165140...	Discount group	List Price ex vat		
Accessory set consisting of pneumatic hose, sealing nut, rubber seal, valve for balls, bicycle and air mattresses								
2 607 010 333	P1d	1	1	218450	GAT	5.24		

