

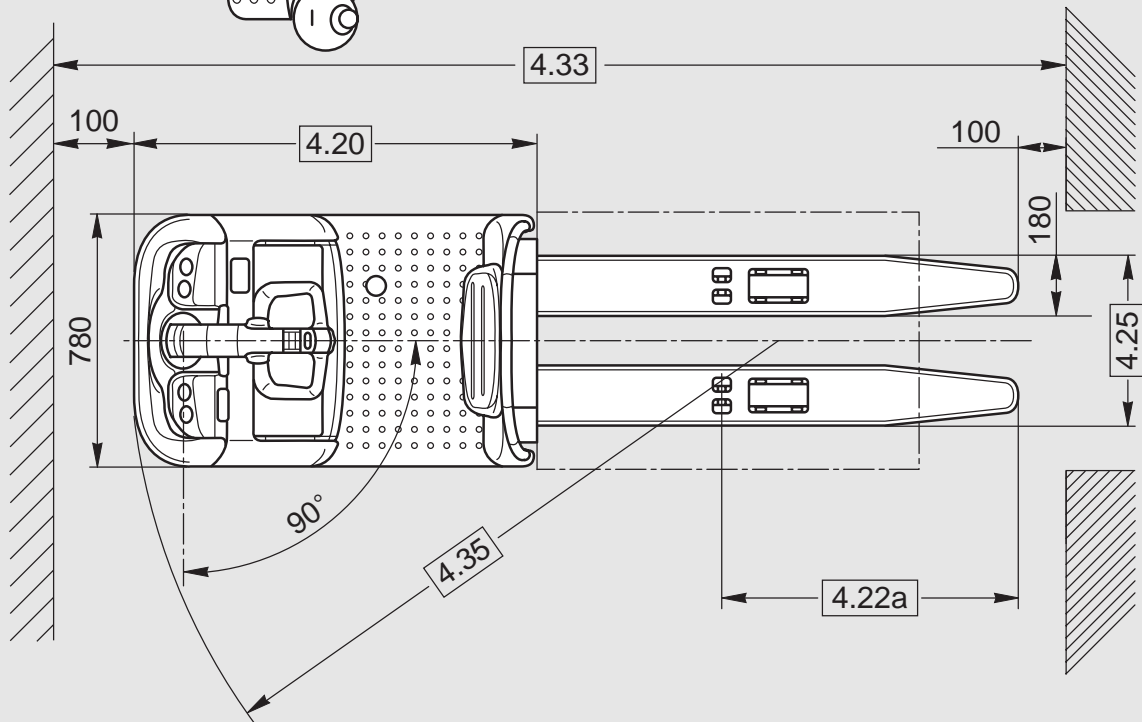
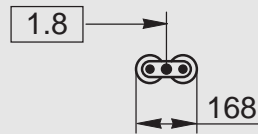
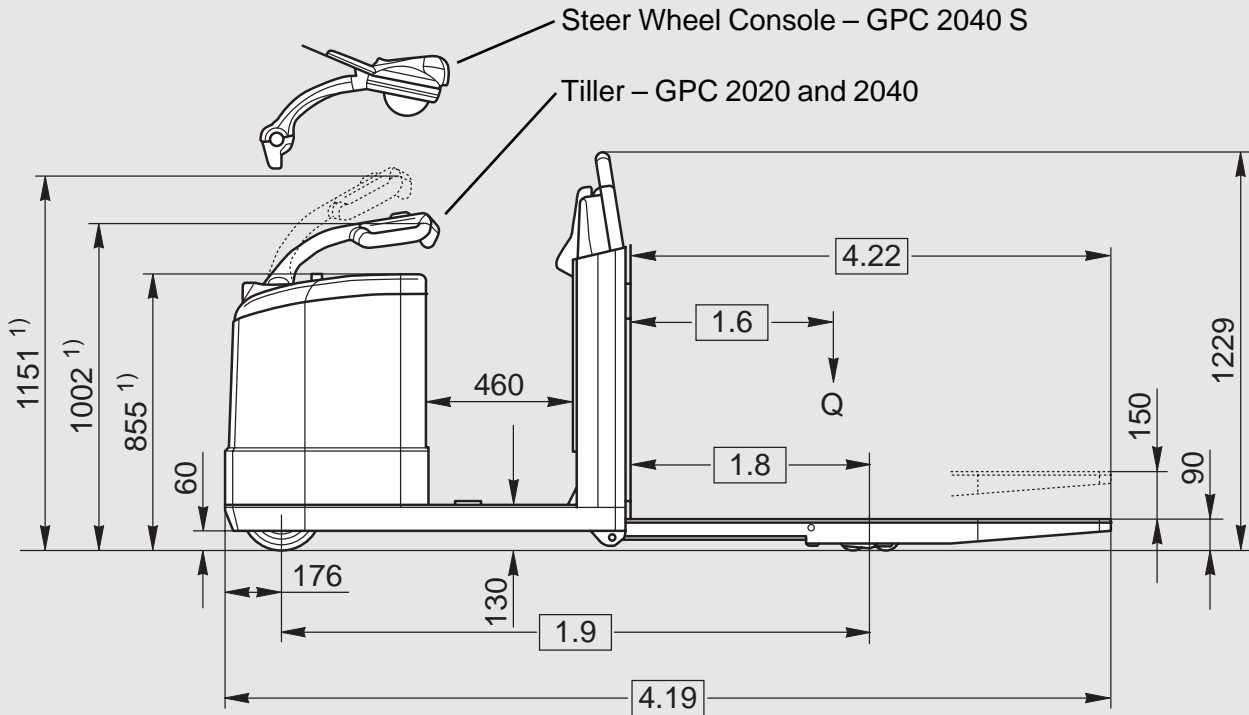


Low Level Order Picker
1600 kg / 2000 kg capacity

Series GPC 2000



Specifications



¹⁾ + 100mm GPC 2040

Specification Series GPC 2000

General Informations	1.1	Manufacturer	Crown Equipment Corporation					
	1.2	Model			GPC 2020	GPC 2040	GPC 2040 S	
	1.3	Prime Mover			electric	electric	electric	
	1.4	Operator Type			centre ride	centre ride	centre ride	
	1.5	Load Capacity		Q t	1.6	2.0	2.0	
	1.6	Load Centre		c mm	see table	see table	see table	
	1.8	Load Distance	forks lowered / raised	X mm	see table	see table	see table	
	1.9	Wheel Base	forks lowered / raised	y mm	see table	see table	see table	
	Weight	2.1	Weight	less Battery	kg	672	692	712
2.4		Axle Load	w. load front/rear	kg	see table	see table	see table	
2.5		Axle Load	w. o. load, front/rear	kg	see table	see table	see table	
Tyres	3.1	Tyre Type	D/C/L		Vulkollan	Vulkollan	Vulkollan	
	3.2	Wheel Size	front	mm	Ø 250x75	Ø 250x75	Ø 250x75	
	3.3	Wheel Size	rear	mm	4x Ø 82x82	4x Ø 82x82	4x Ø 82x82	
	3.4	Additional Wheels	castor wheel	mm	Ø 150x60	Ø 150x60	Ø 150x60	
	3.5	Wheels	number (x = driven) front/rear	mm	1x, 1/4	1x, 1/4	1x, 1/4	
Dimensions	4.4	Lift		h ₃ mm	150	150	150	
	4.8	Operator Stand Height		h ₇ mm	130	130	130	
	4.15	Lowered Fork Height		h ₁₃ mm	90	90	90	
	4.19	Overall Length		l ₁ mm	2260	2260	2260	
	4.20	Headlength		l ₂ mm	1260	1260	1260	
	4.21	Overall Width		b ₁ mm	780	780	780	
	4.22	Fork Dimensions		thxw _{xl} mm	78x180x1000	78x180x1000	78x180x1000	
	4.22a	Fork Tip Length		mm	see table	see table	see table	
	4.25	Width Across Forks		b ₅ mm	520 / 560 / 680	520 / 560 / 680	520 / 560 / 680	
	4.32	Ground Clearance	centre wheelbase	m ₂ mm	60	60	60	
4.33	Working Aisle Width	1000 x 1200 traverse (lowered)	Ast mm	2460	2460	2460		
4.35	Turning Radius	lowered	Wa mm	2030	2030	2030		
Performance	5.1	Travel Speed	w. / w. o. load	km/h	7.3 / 10.0	8.5 / 11.0	9.5 / 12.0	
	5.2	Lift Speed	w. / w. o. load	m/s	0.05 / 0.08	0.05 / 0.08	0.05 / 0.08	
	5.3	Lowering Speed	w. / w. o. load	m/s	0.05 / 0.04	0.05 / 0.04	0.05 / 0.04	
	5.7	Gradeability	w. / w. o. load (5 min. on time)	%	8 / 15	11 / 15	11 / 15	
	5.10	Service Brake			electric	electric	electric	
Motors	6.1	Traction Motor	60 min. rating	kW	1.5	2.0	2.0	
	6.2	Lift Motor	15 % on time	kW	1.3	1.3	1.3	
		Steer Motor	15 % on time	kW	-	-	0.19	
	6.3	Max. Battery Box Size	DIN 43535 B	lxwxh mm	288x628x627	288x628x627/784	288x628x627/784	
	6.4	Battery Voltage	nominal capacity 5h rating	V/Ah	24 / 330L	24 / 330L / 420L	24 / 330L / 420L	
6.5	Battery Weight	nominal ± 5%	kg	288	288 / 385	288 / 385		
Misc.	8.1	Type of Controller			transistor	transistor	transistor	

4.22	Fork Length	mm	1000	1150	1450	1600	2150	2400	2400	2880
4.22a	Fork Tip Length	mm	413	413 ₅₎	413 ₅₎	783	944	783	944	944
1.6	Load Centre	mm	500	600	750	800	1100	1200	1200	1400
1.8	Load Distance	mm ₁₎	770	920	1220	1000	1389	1800	1639	2119
1.9	Wheel Base	mm ₂₎	1854	2004 ₄₎	2304 ₄₎	2084	2473	2884	2723	3203
4.19	Overall Length	mm ₃₎	2260	2410	2710	2860	3410	3660	3660	4140
4.35	Turning Radius	mm ₂₎	2030	2180	2480	2260	2649	3060	2899	3379
2.4	Axle Load (kg)	front	894	978	1114	826	945	1163	1046	1198
	With 2000 kg Load	rear	2095	2021	1906	2204	2123	1922	2038	1919
2.5	Axle Load (kg)	front	692	711	744	726	754	792	776	823
	Without Load	rear	288	278	266	304	303	283	298	294

raised 1) - 115 mm; 2) - 122 mm; 3) - 10 mm; 4) fork Lift - 196 mm; 5) 453 mm;

Options *	1.5 Load Capacity	4.4 Platform Lift	4.4 Fork Lift	4.25 Width Across Forks	4.22 Fork Width	4.22 Fork Length	4.20 Headlength	4.35 Turning Radius
GPC 2040 Platform Lift	2.0	820	150	520/560/680	180	1.000-2.880	1.260	2.030
GPC 2040 Fork Lift	1.0		880	520/570	190	1.150/1.450	1.287	1.984/2.234
GPC 2040 Platform- & Fork Lift	1.0	820	880	520/570	190	1.150/1.450	1.287	1.984/2.234

Platform Lift/Lowering Speed 0.35/0.25 m/s; Fork Lift Speed w./w.o. 0.15/0.22 m/s; Fork Lowering Speed w./w.o. 0.35/0.20 m/s

* not for GPC 2040 S

Capacity

Model 1.6 GPC 2020 - 1600 kg
 Model 2.0 GPC 2040 - 2000 kg
 Model 2.0 GPC 2040S - 2000 kg

Standard Equipment

1. GPC 2020/2040: Four point suspension with centrally located handle.
 GPC 2040 S: Four point suspension with steer wheel and electric steering.
2. Traction speed control (MOSFET).
3. Stepless variable traction speed forward and reverse.
4. Spring applied, electro magnetic released brake. Load sensing two stage brake on model 2040, single stage brake on 2020.
5. Key switch.
6. Horn.
7. Series wound drive and compound lift motor.
 Threephase motor for electric steering 2040S.
8. Emergency power disconnect switch.
9. Battery connector Anderson SBE 160.
10. Battery discharge indicator with hour meter and lift lock out.
11. Vulkollan drive tyre, castor and tandem load wheels.
12. DIN - Batteries 24 V DIN 43535, Connection B, GPC 2020 = max. 360 Ah, GPC 2040/2040S = max. 450 Ah.
13. Non-slip mat in operator compartment.
14. GPC 2040: Storage in power unit top cover. Additional storage in backrest.
15. Adjustable „butt“ rest in backrest area for operator (Model 2040 and 2040 S only).
16. Compartment cushion pads for knee and back.
17. GPC 2040: "Quik pic" function integrated in handle to move truck power unit first from outside operator compartment with reduced travel speed and steer angle sensing.
 GPC 2040 S: "Quik pic" operation switch in steering control panel.
18. GPC 2040 S: Duplicate controls for lifting, lowering and forks forward travel in backrest.

Optional Equipment

1. GPC 2020, 2040: Step for second level picking.
2. Support bars for second level picking (2040 only).
3. Battery compartment rollers.

4. Load backrest.
5. Pallet entry rollers (Fork length 1000 and 1150).
6. GPC 2040: Walk along function in backrest allows the truck to be driven from outside operator compartment with reduced travel speed and steer angle sensing in fork direction (not with fork lift, platform lift and platform- + fork lift).
7. GPC 2020: Walk along function in backrest allows the truck to be driven from outside operator compartment with reduced travel speed in power unit direction.
8. GPC 2040: Fork lift.
9. GPC 2040: Platform lift.
10. GPC 2040: Platform- and fork lift for Model 2040 only.
11. Cold store conditioning.

Wheels and Tyres

Vulkollan drive tyre dia 250x75
 Vulkollan castor dia 150x60 adjustable to equalize drive tyre wear. Tandem Vulkollan load wheel dia 82 x 82.

Electrical System

24 volt electrical system incorporating:

1. Curtis MOSFET controller, microprocessor controlled with on-board service diagnostic capability.
 This transistor controller provides benefits such as maximum energy efficiency, reduced maintenance and infinite speed control capability.

Fault monitoring system:

Through a fault flash code signalled by an LED, 17 detectable faults can be recognized. Using a hand held control unit, these faults can be displayed digitally. With the hand held unit in the test mode functional test of components is also possible. All controller settings are programmable through this unit.
 Incorporates storage register for fault history that can be interrogated by service personnel.

2. Robust drive and lift motors provide high reliability and efficiency.
3. Emergency disconnect is easily accessible from all operating positions.
4. Solid state switching ensures high component reliability.
5. Control and power circuits are fused. Distribution panel and controller are short circuit protected.
6. All wiring is colour coded.

Hydraulic System

1. Heavy duty pump motor with reservoir and integral control valve.
2. Pressure compensating flow valve for smooth lowering speed.
3. Integral pressure relief valve protects the system from excessive overload.
4. Lift cylinder is designed with a chrome plated rod and long life polyurethane seals.

Fork / Lift Mechanism

1. Forks are manufactured from 5 mm high strength steel.
2. All lift structure pivot points are equipped with heavy wall bushings for long life. Each pivot point can be greased.
3. Round tension bars with rolled threaded ends and forged risers made of high strength steel, designed for maximum durability.

Drive System

A heavy duty drive unit is vertically mounted to the frame. The helical input spur gear ensures low drive noise emission. The ring and pinion set is mounted in heavy tapered roller bearings and runs in an oil filled sealed housing. The spring applied / electromagnetic released brake is mounted on the top of the drive motor.
 The 2040 model has a load sensing dual step brake. Brake torque depends on the load on the forks and guarantees safe and smooth braking. The brake is activated by releasing the foot pedal or pushing the tiller arm downwards (2040 only).

Chassis

The chassis is designed with soft round contours to avoid product damage in the event of collisions. The structure has been CAD designed for maximum strength and low deflection. A heavy bumper skirt around the truck minimizes truck damage.

Control Handle / Steering

All control buttons, forward and reverse travel, lift and lower and the horn button are integrated in the handle. The tiller arm can be adjusted to three drive positions. Low steering effort is required to maneuver the truck. Steering is transmitted thru a heavy duty steer shaft and an adjustable chain drive to the drive unit.

Electrical Steering with Steering Wheel

The low emission, fully electronic steering system is designed for minimum steering effort. Ergonomically ideal steering is achieved with just 6 turns of the steering wheel required for an 180° wheel turn. The threephase steer motor is maintenance-free and helps to keep service costs down. The energy-saving MOSFET three phase controller uses only the energy required for steering. The walk along operation switch for electric steering is contained in the steering control panel as standard. When activated the drive wheel is set to straight-ahead travel. The truck then travels only at reduced speed. The backrest contains a lift/lower rocker and a travel switch. The driver can also use the lift/lower rocker to lower and raise the forks while looking towards the forks. When the travel switch is pressed the truck moves at reduced speed in the fork direction.

Work Platform

The driver platform has a rubber floor mat, soft knee and back pads and the 2040 model is equipped with an adjustable „butt rest“ for maximum driver comfort.
 The driver platform does not lift with the forks and therefore always maintain the same low step height from the ground. The wide open platform allows easy walk thru.

Batteries

Battery can be removed thru the top or rolled out to the side. Battery can be easily accessed by a hinged top cover and removeable side covers.

Safety Regulations

Conforms to European safety standards.
 Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.

European Manufacturing:

Crown Gabelstapler GmbH
 Roding, Germany

Crown Equipment
 Galway, Ireland

