The new Unimog.

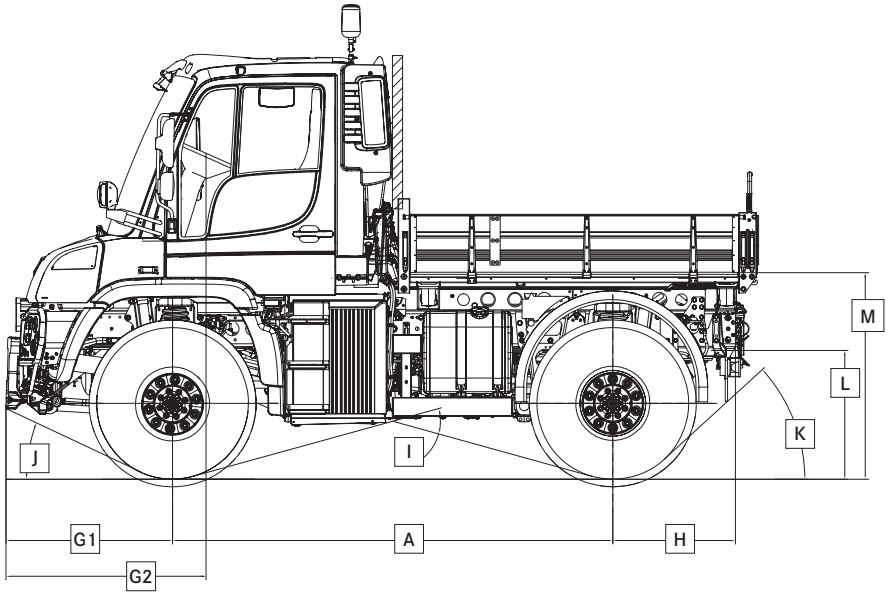
Technical data U 216 to U 530.

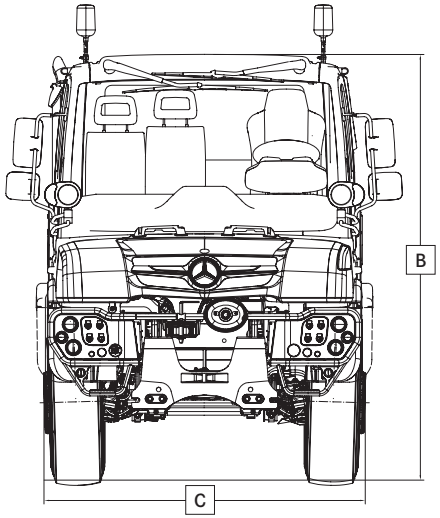


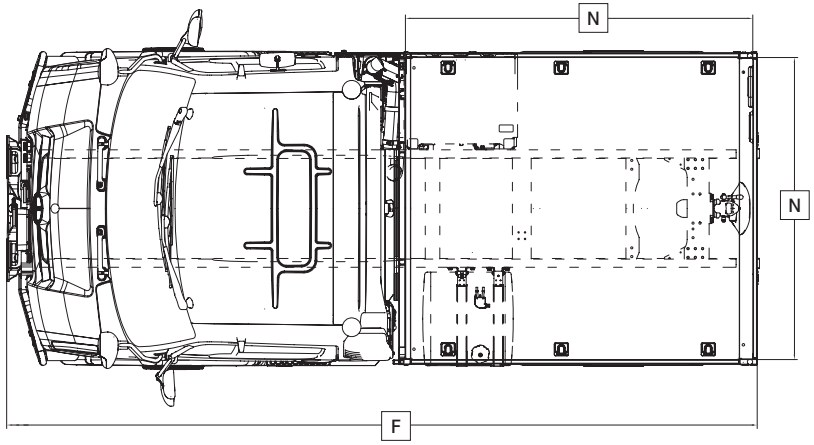
Mercedes-Benz

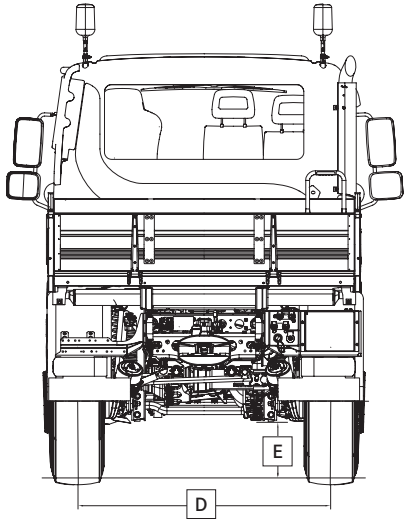
Trucks you can trust

Technical drawing of Unimog implement carrier BlueTec 6.









Model type 405.105: See table for dimensions.

Dimensions and weights.

Models	U 216 / U 218	U 318	U 423		U 427 / U 430		U 527 / U 530	
			Short	Long	Short	Long	Short	Long
Model type	405.090	405.104	405.105	405.125	405.110	405.125	405.202	405.222
A Wheelbase	2800	3000	3000	3600	3150	3600	3350	3900
B Vehicle height	2855	2845	2900	2900	2900	2900	2900	2900
C Vehicle width	2200	2200	2200	2200	2200	2200	2300	2300
D Track width	1794	1794	1734	1734	1734	1734	1828	1828
E Ground clearance	335	325	383	383	383	383	379	379
F Vehicle length	4980	5155	5150	5755	5300	5755	5440	6215
G1 Implement to axle centre	1145	1145	1142	1142	1142	1142	1142	1142
G2 Distance implement to steering wheel centre	1363	1363	1363	1363	1363	1363	1363	1363
H Rear overhang	860	840	840	840	840	840	840	1000
I Ramp angle	27°	26°	30°	26°	30°	26°	28°	24°
J Approach angle (front)	25°	27°	33°	33°	33°	33°	35°	35°
K Departure angle (rear)	37°	37°	42°	42°	42°	42°	41°	35°
L Height of centre trailer coupling	825	815	873	873	873	873	869	869
M Height of platform loading edge	1357	1347	1407	1407	1407	1407	1435	1435
N Interior size tipper platform (length × width × height)	2200 × 2075 × 400	2385 × 2075 × 400	2385 × 2075 × 400	2900 × 2075 × 400	2385 × 2075 × 400	2900 × 2075 × 400	2650 × 2200 × 400	3430 × 2200 × 400
Turning circle	12.6 m	13.7 m	13.7 m	16.5 m	14.3 m	16.5 m	15.1 m	16.9 m
GVW (with optional extras)	10.0 t	11.0 t	13.8 t	14.0 t	14.0 t	14.0 t	16.5 t	16.5 t
Maximum weight on front axle	5.2 t	5.5 t	6.9 t	7.0 t	7.0 t	7.0 t	7.5 t	7.5 t
Maximum weight on rear axle	5.5 t	6.0 t	7.8 t	8.0 t	8.0 t	8.0 t	9.5 t	9.5 t

Vehicle dimensions in mm, tyres 365/80 R 20 (U 216 – U 318) or 365/85 R 20 (U 423 – U 530), partially loaded.

Engines.

Standard:

- New cleaner BlueEfficiency Power engines with Euro VI emission standards
- Direct injection diesel, turbocharger/intercooler
- Two control systems (drive/operational modes)
- Electronic manual throttle control
- Hydrostatic fan drive
- Air compressor 310 litres/min
- Air drier
- Air filter, water separator
- Cold start to -15 °C
- Long service intervals (1400 operating hours)

Exhaust gas after treatment unit

- Diesel particulate filter
- SCR catalytic converter

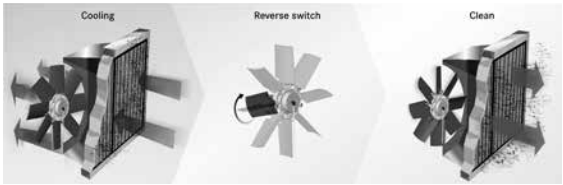
Powerful premium engine brake

- 2-stage decompression brake
- Maximum braking performance
  - OM 934: 178 kW
  - OM 936: 302 kW
- Operated via steering column control stalk

Optional extras:

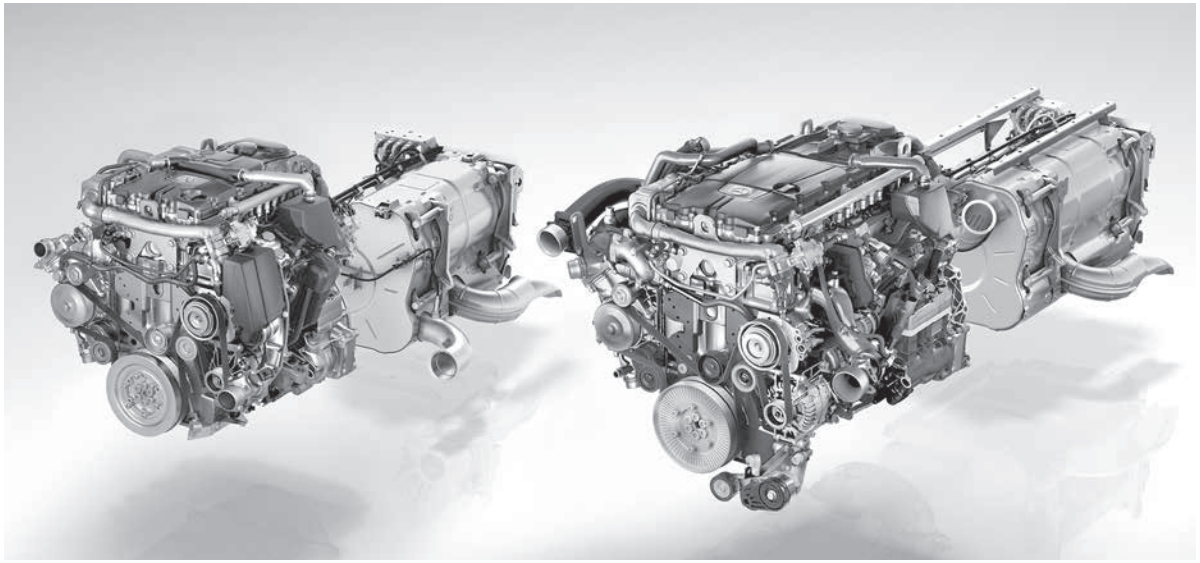
- Engine preheating
- Fuel preheating
- Reversible fan
- Cold climate package (to -26 °C)

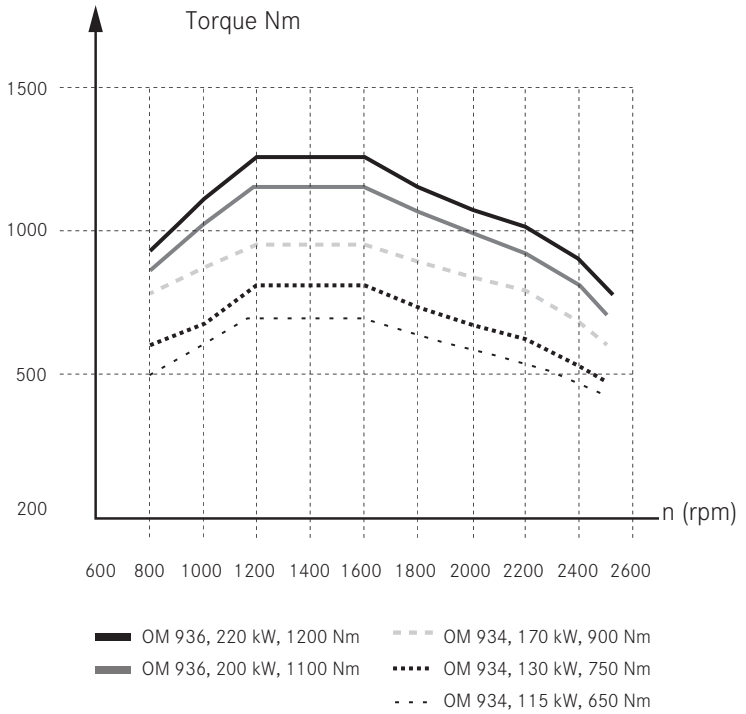
Availability of optional extras may vary.



Reversible ventilation

Model	U 216	U 218	U 318	U 423	U 427	U 430	U 527	U 530
Engine (Euro VI)	OM 934	OM 934	OM 934	OM 934	OM 936	OM 936	OM 936	OM 936
Maximum output (kW)	115	130	130	170	200	220	200	220
Maximum output (hp)	156	177	177	231	272	299	272	299
Number of cylinders	4	4	4	4	6	6	6	6
Maximum torque (Nm)	650	750	750	900	1100	1200	1100	1200
Rated engine speed (rpm)	1200 – 1600	1200 – 1600	1200 – 1600	1200 – 1600	1200 – 1600	1200 – 1600	1200 – 1600	1200 - 1600
Displacement (cc)	5132	5132	5132	5132	7698	7698	7698	7698
Fuel tank/increased capacity (L)	145	145	145/200	200	200/250	200/250	200/250	200/250
AdBlue tank (L)	18	18	25	25	25	25	25	25





Engine specifications	OM 934 (4-cylinder engine)			OM 936 (6-cylinder engine)	
Model type	934.971	934.971	934.972	936.971	936.972
Output: DIN (kW/hp)	115/156	130/177	170/231	200/272	220/299
Number of cylinders, configuration	4, vertical, in line	4, vertical, in line	4, vertical, in line	6, vertical, in line	6, vertical, in line
Operating principle	4-stroke direct injection diesel	4-stroke direct injection diesel	4-stroke direct injection diesel	4-stroke direct injection diesel	4-stroke direct injection diesel
Total displacement (cc)	5132	5132	5132	7698	7698
Injection pressure (bar)	up to 2400	up to 2400	up to 2400	up to 2400	up to 2400
Compression	17.6 : 1	17.6 : 1	17.6 : 1	17.6 : 1	17.6 : 1
Maximum torque (Nm)	650	750	900	1100	1200
Torque increase (%)	30	33	22	27	26
Fan drive	hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic

Transmission / Brakes / Steering.

Standard equipment:

Transmission:

- Fully-synchronised Mercedes-Benz transmission, eight forward and six reverse gears
- Single plate dry clutch, self-adjusting
- Permanent all-wheel drive, engageable interaxle differential lock
- Cruise control / speed limiter
- Limiter Vmax – up to 90 km/h (56 mp/h)
- Electropneumatic gear shift (EPS)
- Electronic Quick Reverse (EQR)

Steering:

- Hydraulic power steering

Brakes:

- High-pressure pneumatic brakes (18 bar)
- Pneumatic disc brakes on all four wheels
- 4-channel off-road ABS, disengageable
- Automatic load-dependent braking (ALB)
- Compressed air for auxiliary consumers
- Air-operated brake
- Brake lining wear indicator

Optional extras:

- Hydrostatic traction drive 0 – 50 km/h
- Automatic transmission [1]
- Torque converter clutch [2]
- All-wheel steering [3]
- Right-hand drive
- Working and crawler gear group
- All-wheel parking brake

Availability of optional extras may vary.
[1] Available for U 318 to U 530
[2] Available for U 318 and U 423
[3] Available for U 423 to U 530

Speeds — Working gears calculated with basic gears/5.76 — Crawler gears calculated with basic gears/55.87

Model	Direction	Basic gears								Working gears (optional extra)								Crawler gears (optional extra)							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
U 216	Forward	5.9	8.6	13	17.7	26	37.5	56.8	77.3	1.03	1.49	2.26	3.07	4.51	6.51	9.87	13.4	0.11	0.15	0.23	0.32	0.47	0.67	1.02	1.38
U 218	Reverse	3.9	5.6	8.5	11.6	17.1	24.6			0.68	0.98	1.48	2.02	2.69	4.28	6.49	8.82	0.07	0.1	0.15	0.21	0.31	0.44	0.67	0.91
U 318	Forward	7.1	10.2	15.5	21.1	31.0	44.7	67.8	92.1	1.23	1.77	2.69	3.66	5.38	7.76	11.7	16.0	0.13	0.18	0.28	0.38	0.55	0.8	1.21	1.65
	Reverse	4.7	6.7	10.2	13.8	20.4	29.4			0.81	1.17	1.77	2.4	3.54	5.1	7.73	10.5	0.08	0.12	0.18	0.25	0.36	0.53	0.80	1.08
U 423 **U 427** **U 430**	Forward	7.2	10.5	15.9	21.6	31.7	45.7	69.4	94.3*	1.26	1.82	2,75	3.74	5.51	7.95	12.0	16.3	0.13	0.19	0.28	0.39	0.57	0.82	1.24	1.69
	Reverse	4.8	6.9	10.4	14.2	20.8	30.0	45.6**	61.9**	0.83	1.19	1.81	2.46	3.62	5.22	7.92	10.7	0.09	0.12	0.19	0.25	0.37	0.54	0.82	1.11
U 527	Forward	7.1	10.2	15.4	21.0	30.9	44.6	67.6	91.9*	1.23	1.77	2.68	3.65	5.37	7.74	11.7	15.9	0.13	0.18	0.28	0.38	0.55	0.8	1.21	1.64
U 530	Reverse	4.6	6.7	10.1	13.8	20.3	29.3			0.81	1.16	1.76	2.4	3.53	5.09	7.71	10.4	0.08	0.12	0.18	0.25	0.36	0.52	0.79	1.08

* Vmax = 90 km/h ** only for road-rail operations Driving speeds may not be the same when using different tyres.

Frame / Axles / Wheels.

Standard equipment:

- Continuous ladder-type frame, stable design
- Trailer jaw coupling with socket pin at the front
- Subframe for front mounting plate
- Implement and body-mounting points are integrated in the frame
- Coil springs with progressive codes
- Anti-roll bar at the front and rear
- Telescopic shock absorbers
- Portal axles
- Triple-steered axles
- Differential lock on rear axle
- Underbody corrosion protection
- All differential locks are electropneumatically engageable and disengageable via a dog clutch while driving (100% locking effect)

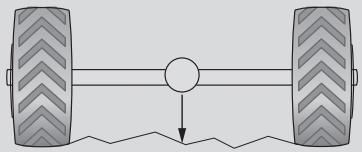
Optional extras:

- Differential lock on front axle
- Front mounting plate
- Three-sided tipper platform
- Tyre pressure regulation system: tirecontrol plus [1]
- Frame mounting brackets (in middle, behind and between axles)

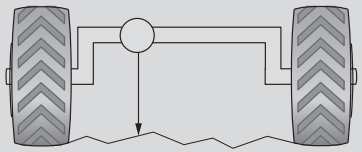
Availability of optional extras may vary.
[1] Available for U 318 to U 530

Model	U 216	U 218	U 318	U 423	U 427	U 430	U 527	U 530
Axle ratio	6.53	6.53	6.53	6.38	6.38	6.38	6.38	6.38
Standard tyres								
Smallest (tyre/rim)	295/60 R22.5	295/60 R22.5	295/60 R22.5	315/80 R22.5	315/80 R22.5	315/80 R22.5	365/85 R20	365/85 R20
Largest (tyre/rim)	425/75 R20	425/75 R20	425/75 R20	445/70 R24	445/70 R24	445/70 R24	495/70 R24	495/70 R24

Other types of tyres available on request.



Conventional axles



Portal axles

Portal axle with wheel hub drive: provides high ground clearance and low vehicle centre of gravity as both axle tube and differential are situated above the wheel centre and the differential is not in the centre of the axle.

Cab, exterior.

Standard equipment:

- Panoramic cab, seating position behind the front axle
- Short distance from implement to steering wheel
- Cab made of corrosion-free fibre composite material
- Cab stability according to ECE-R-29/2
- Comfort mounting, damped vibrations
- Cab tilt
- Panoramic laminated glass windscreen with low extension
- Door windows with low extensions to allow better view of working areas
- Large window on rear wall
- Exhaust system: vertical tail pipe
- Electrically adjustable exterior heated mirrors on both sides
- Heat-insulating windows all round
- Electric windows
- Vertical air intake
- Non-slip footholds with handhold
- Windscreen wiper system installed on cab roof, 3-stage with intermittent wiper control and two stopping positions

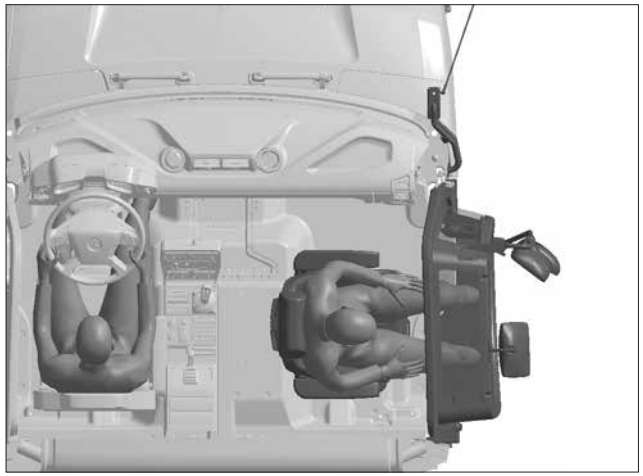
Optional extras:

- Hydraulically-operated cab tilt
- Heated windscreen
- Mowing door instead of right-hand door
- Front camera system
- Exterior sunblind

Availability of optional extras may vary.



Panoramic cab



Mowing door





Top: Wipers fitted on cab roof; Bottom: Front camera

Cab, interior.

Standard equipment:

- Multifunction steering wheel
- Steering column adjustable for height and tilt
- Seats with tapered backrest and integrated headrest
- Powerful heating and ventilation system with pollen filter and residual engine heat utilisation
- Cab floor allows through-cab access
- Stowage compartments and trays
- Overhead console with 2 DIN installation compartments for radio/tachograph
- Three individual sun visors
- Centre console with central controls and 2 installation compartments
- Instrument cluster (10.4 cm diagonal)
- On-board diagnostics for vehicle condition
- Right-hand steering column control stalk for traction drive
- Seats with fore and aft, height and tilt adjustment, and adjustable backrest with integrated 3-point seat belts
- Door lining with armrest and bottle holder
- Interior lighting with reading lamps for driver and co-driver
- 3 coat hooks
- Vehicle tool kit
- Cable duct (sealed front and back)
- Left-hand steering column control stalk for high-beam headlamps and windscreen wipers
- Air conditioning [1]

Optional extras:

- Air-sprung seats (driver, co-driver)
- Heated seats
- Instrument cluster (12.4 cm d.), colour display
- Interchangable steering VarioPilot®
- Swivel mowing seat
- Twin passenger seat
- Auxiliary heating
- CD radio with Bluetooth
- Steering column control stalk on left for transmission controls

Availability of optional extras may vary.
[1] Optional extras for U 216/U 218



Interior view of interchangable steering VarioPilot®



Height/tilt adjustable steering column



Extra steering column control stalk on left

Power / Lighting.

Standard equipment:

- On-board 24v power supply
- Electronics box (protected in cab) with a diagnostics socket
- Permanent power socket 24 V/15 A
- CAN-Bus networking
- Trailer power socket at rear, 15-pin /24 V
- Battery 140 Ah
- Electronic vehicle management system
- EMC-certified
- Alternator 14 V/180 A
- Daytime-running lamps mounted in bumper
- Headlamp range adjustment
- Rear fog lamps
- Reversing lights
- Exterior marker lamps

Optional extras:

- Permanent power socket 12 V/15 A, C3 signal
- On-board socket 24 V/25 A, C3 signal
- 32-pin 24 V/40 A for implements, C3/C4
- High-output alternator 28 V/150 A
- Work lamps at the rear
- Raised headlamps (front-mounted implements)
- Rotating beacons

Availability of optional extras may vary.



32-pin implement socket

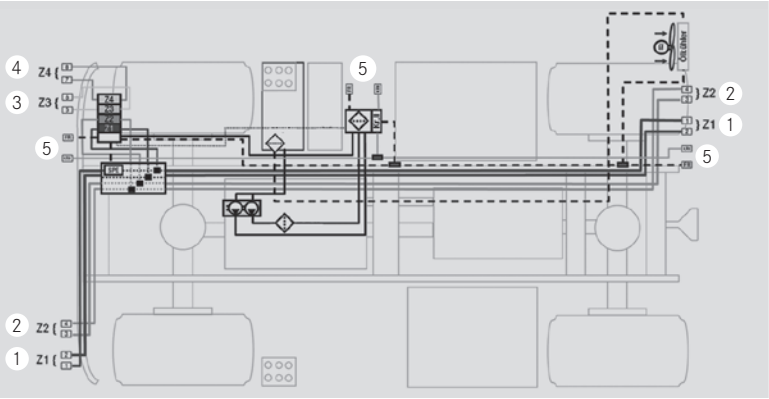


Daytime-running lamps



Rotating beacons and additional headlamps

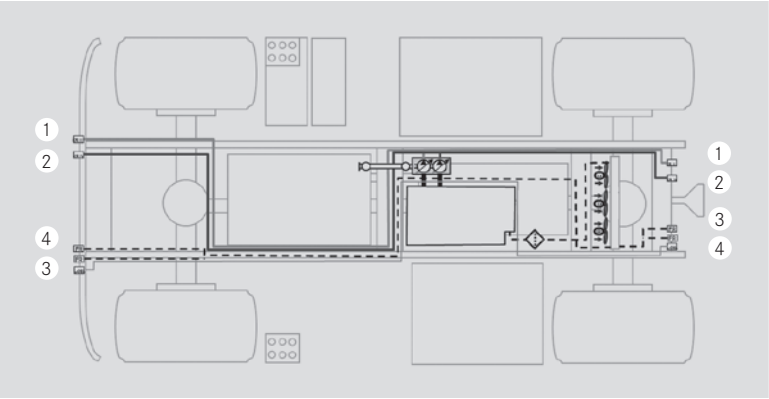
Optional hydraulics / PTOs.



Working hydraulics

Circuit 1
1 Cell 1 (1+2)
2 Cell 2 (3+4)
3 Cell 3 (5+6)
4 Cell 4 (7+8)

Circuit 2
5 Pressure connection + return flow line



Power hydraulics

Circuit 3
1 Pressure connection
3 Return flow line

Circuit 4
2 Pressure connection
4 Return flow line

- Working or Local Authority hydraulics according to EN 15431 to control implement operations or to run continuous consumers (available in hydraulic packages)
- Actuation of circuit I via 2 to 4 dual action valves with float position
- Snowplough relief
- Oil reservoir: 45 litres
- Removable quantity: 30 litres

Hydraulics packages	
Hydraulics for tippers, other consumers	20 litres/min, 185 bar
Single-circuit hydraulics	flow rate 55 litres/min and 200 bar working pressure
Dual circuit hydraulic system, proportional controls	Circuits I/II, flow rate of 32/55 litres/min and 200/240 bar working pressure
Power hydraulics circuits III/IV[1]	each operating with 125 litres/min, 280 bar

[1] Available for U 318 to U 530

Power Take-Offs	
Front PTO	160 kW
Engine-driven PTO	i = 0.933
Fast transmission-driven PTO	with 4-hole connection: i = 1.0 very fast, with flange: i = 0.61

In addition to this extensive range of standard and optional equipment, we are able to provide you with a large number of other optional features as well as additional equipment to suit your individual needs. Your experienced Unimog Dealer will be happy to offer you support and advice.

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