



PIAS 4x4

ACHLEITNER 4WD-SYSTEM



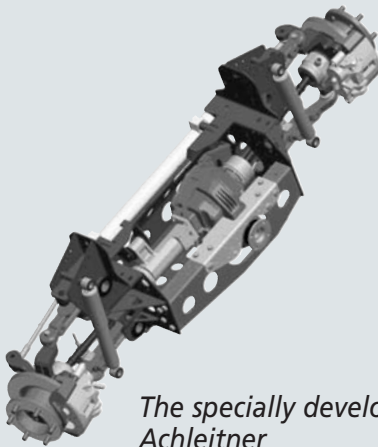
**... Not follow any well-trodden path –
but go your own way.**

All-wheel drive on road vehicles

All-wheel drive vehicles are used for various reasons as they have improved traction, particularly under bad road conditions such as wet, ice, snow, mud or leaves.

The handling of permanent all-wheel drive vehicles is significantly better under these types of demanding conditions. It should also not be forgotten that driving in the mountains, accelerating or cornering, and driving on forest roads with loose sand or gravel surfaces can make real demands on vehicle and driver. To ensure best possible handling and road holding in these situations, the **Achleitner PIAS 4x4 all-wheel system** is used.

All models of the IVECO Daily C range can be converted, – whether chassis, single cab, double cab, box van, flatbed or tipper – up to a total weight of 6.5 tonnes. This means a wide range of possible uses is covered.



The specially developed Achleitner front axle beam



The Achleitner all-wheel system on the PIAS 4x4 – rugged and strong!

Typical uses of the PIAS 4x4

Fire services, rescue services, landscape work, forestry, power suppliers, local authorities, police, building and construction, military, mobile home, ...

Functions of permanent all-wheel drive

With permanent all-wheel drive, all the wheels are driven during operation. The front and rear axles are connected through a transfer case. This transfer case equalizes differences in axle speed (particularly when cornering) and thus prevents strain in the driveline. It is also possible to use a fully operational ABS system. Tyres and propeller shafts are therefore not subject to increased wear.

Selecting low range mode

Low range mode (i=2.5) enables very steep gradients to be climbed. The vehicle moves forward at low speed and high torque. Low range mode is selected mechanically.

Customer advantages

Apart from the increased traction and excellent road holding, THE crucial advantage of the PIAS 4x4 is the centre differential. This is designed so that when driving normally the power is 50% distributed to the front axle and 50% to the rear axle, simulating "normal" operation.

Drivers of the PIAS 4x4 will appreciate that their permanent all-wheel drive system handles like a standard vehicle under dry conditions.

Achleitner front axle carrier

Front axle of torsion bar spring design, with independent suspension on double wishbones (trapeze shape) controlled via diagonal, trailing arms, two telescopic shock absorbers left and right. A torsion bar stabilizer on the front axle helps to improve stability and handling as well as reducing body roll caused by lateral acceleration. The Achleitner front axle differential is built into a specially produced front axle carrier. In addition the Achleitner stub axle and wheel bearings have been strengthened.

The drive shafts are special low-noise quality (GKN shafts). The front axle beam is also available with optional 100 % differential lock for 3.5 – 5t.

All steel parts are KTL primed and powder coated to ensure best possible corrosion protection.

Technical Data:

Total weights:	Von 3,5 – 6,5 t
Wheel bases:	All available from factory
Drive:	Permanent
Low range:	i = 2,5
Power distribution FA:RA:	50:50
Differential locks:	Rear: Standard on basic vehicle to be ordered Front: optional – additional charge Center: in transfer case
Gearbox:	Manual – 6 gears
Tyres:	3,5 – 5t: Standard tyres 195/75 R16 6 – 6,5t: All terrain tyres ² 225/75 R16 Optional – gegen Mehrpreis All Terrain Bereifung ¹
Possible final drive ratio:	3,5 – 5t: i=3,917 bzw. 4,889 6 – 6,5t: i= 5,130
Additional weight for 4x2:	ca. 240 kg
Chassis elevation:	Front: ca. 80 mm Back: ca. 100 mm
Front wheel suspension:	Torsion bar springs
Rear axle:	Simple differential gearing
Tank capacity:	70l bzw. 100l
Details & accessories:	- Suitable for snow chains - Crash bar for transfer case - Oil dipstick for transfer case - Individual vehicle registration - Maintenance and service instructions

¹) Standard tyres will be retained on exchange incl. assembly, wheel balancing and tachymeter adjustment
²) See ¹) + additional reduction of technical RA load to 4,480 kg



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FAHRZEUGBAU
REIFENZENTRUM



The illustrated vehicles are partly fitted with optional equipment available at an extra charge. Subject to changes in design, equipment and delivery, errors excepted.



Franz Achleitner Fahrzeugbau und Reifenzentrum GmbH
 Innsbrucker Straße 94 | A-6300 Wörgl | AUSTRIA
 Phone: +43 (0) 5332 7811-0 | Fax: +43 (0) 5332 75222
 Mail: office@achleitner.com | www.achleitner.com