

Hydraulic lift solutions

with HydroElite® drive and control system



When we build, let us think that we build forever

This quote from the English philosopher John Ruskin has become our guiding principle. In concrete terms, this means that a new lift must be of such good quality that it lasts the entire lifetime of the building.

During this lifetime, the lift is likely to be modernised two or three times, and this sets high demands on the design and modularity of the constituent components.

We build our hydraulic lifts with sustainability, modularity and robustness as key words. Our own design department are flexible and can customise a solution in each case including tailored shaft solutions. It enables us to handle each type of lift, no matter of purpose or building.

Over the last 20 years, many lift manufacturers have decided to design their lifts in a less modular way than previously. This means that these lifts are more difficult to modernise than before.

Our lifts are always supplied with our open drive and control system HydroElite, which gives the lift many unique characteristics. The lift is modular, which means single components in a simple way can be exchanged one by one in a future modernisation.

Together with the following presentation of our product portfolio we explain the advantages of installing new sustainable lifts from Hydroware with the innovative and proven HydroElite drive and control system.

HydroElite® - robust, economical, convenient

HydroElite is a drive and control system for hydraulic lifts. By providing both the drive and control, we can guarantee frictionless functionality and easy handling from the very beginning. The robust, modular design of HydroElite makes it ideal for new sustainable lift installations. The complete system is fully open, and you don't need any special tools to install or service the lift.

Hydroware: Top quality from Sweden for 20 years

Hydroware produces and develops the drive and control system HydroElite in Sweden. The design department for new lift solutions is placed in northern Italy. A reliable professional partner in the area of hydraulic lifts with over 20 years' experience.



10 reasons

for the leader in matters of
drive and control systems



Successful Modernisation

- All from one supplier. Control and drive are coordinated and harmonise perfectly with each other
- Our complete package saves you a lot of work and coordination
- Immediate commissioning possible, all systems are pre-set and tested in a test station at the production facility



Swedish quality

- High level of vertical integration at our headquarters in Sweden certified to ISO 9001:2015
- Use of high-quality brand components
- All systems fully tested in the test stations before delivery



Unique technology

- Unique servo-valve allows direct approach to floor without creeping, similar to frequency-controlled traction lifts
- Thanks to the servo valve, Hydroware is able to operate existing systems, where other manufacturers must refuse
- Permanent self-learning/- and self-adjusting valve system, no adjustments necessary



Sustainability

- 50 - 70 % lower energy consumption compared to other electrical valves
- Use of existing mechanical and electrical supply connections possible. The available main supply connection value can often be reduced by one third



Fast delivery

- Delivery within only 5-6 weeks of the HydroElite and 8-12 weeks of a new lift
- Express deliveries within 1-2 weeks of the HydroElite available on request
- Direct delivery to the construction site possible



Quick installation

- Short assembly times due to preset parameters and pre-wired installation
- Assembly run without the need for installing complete shaft wiring looms
- Easy installation or retrofitting of additional components through freely programmable outputs/inputs and bus technology
- For faster installation, the assembly run can also be carried out with a wireless installation handle
- Open control, with plain text display and plain text error description and no extra tools for maintenance or commissioning



Technical Support

- English-speaking support for the complete product (control and drive) with on-site support and training
- 24-hour service of HydroElite spare parts, 20-year spare parts availability, online documentation
- Commercial and technical advice on site, including site visits of complex and special lift solutions



Complete lift systems

- Complete lift systems as tailor-made solutions based on existing shaft dimensions, pit and headroom
- Standard solutions for narrow lifts
- Flexible car lifts and freight lifts
- All the advantages of the HydroElite drive unit
- Focus on robust and sustainable hydraulic lifts



Higher Lift Performance & Reliability

- The unique servo-valve allows direct approach to floor without creeping. This allows shorter travel times and more trips per hour than with a comparable electronic valve
- No by-pass of oil – Temperature problems of the hydraulic drive caused by frequent travel are eliminated by the regulating servo valve
- Oil coolers are no longer needed



Competent partner

- Over 20 years experience in hydraulic lifts
- Future-proof, 15 % of the employees work in research and development
- Certified to ISO 9001:2015

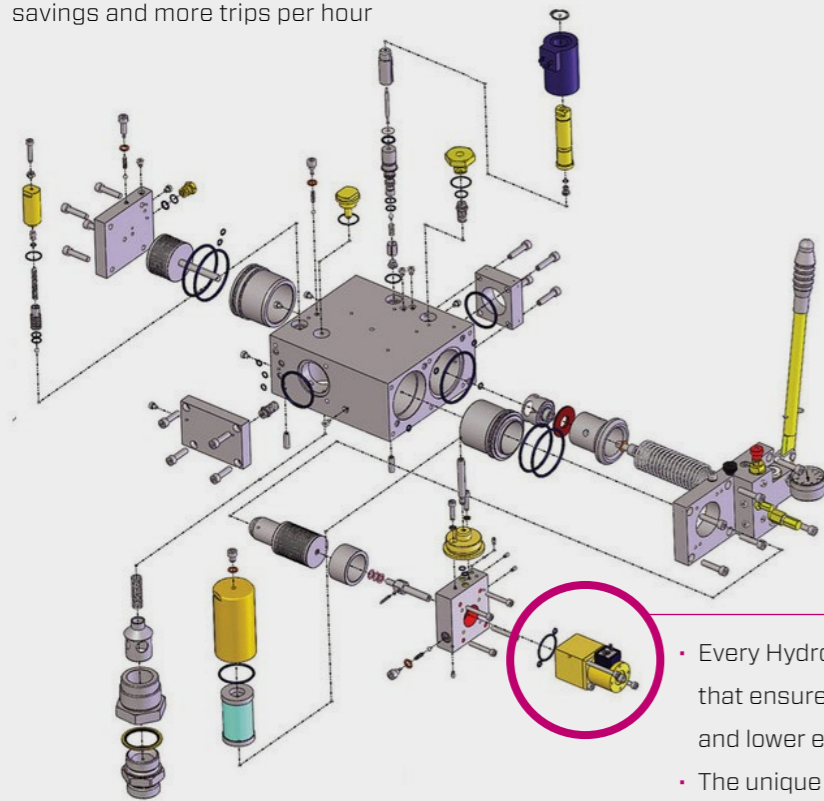
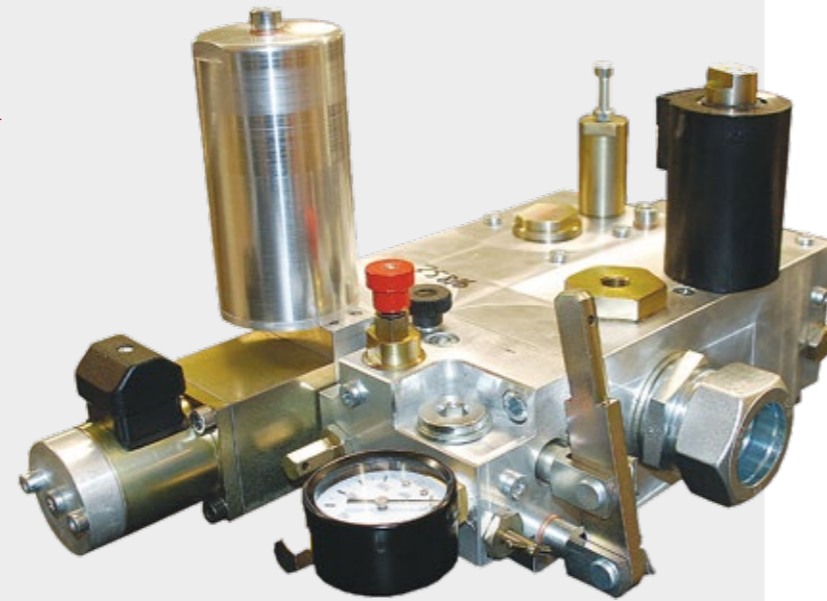


Our centrepiece: the unique servo valve

The outstanding characteristics of our directly controlled servo valve have played a large part in our long history of success.

The benefits at a glance

- All units have the same servo valve
- Direct approach to floor without creeping, which gives excellent travel comfort
- Self-learning and self-adjusting valve system – quick and simple commissioning and no manual adjustments
- The frequency control is used solely to cut power demand
- The servo valve is controlled directly by the absolute positioning encoder
- No need for by-pass of oil, means no additional heating of the oil
- Oil cooler is normally not required
- The elimination of oil by-pass and the direct approach to floor means maximum energy savings and more trips per hour



- Every HydroElite is fitted with the unique servo valve that ensures shorter travel times, higher capacity and lower energy consumption
- The unique servo valve enables the lift to arrive directly at the floor without creeping

HydroElite® VENI

HydroElite VENI has up to 50 % lower energy consumption in comparison to other conventional electronical or mechanical systems. It is equipped with the unique servo valve system valve from Hydroware, which means short reaction times, no by-pass of the oil and travels with direct approach to the floor, without creeping. The lift gets the absolute best features for an electronically controlled valve with soft starter, and can only be compared to frequency controlled systems today. With the same manufacturer for both drive and control system you get fast and smooth order handling, quick installation, easy inspection, a reliable final product, same support contact for both drive and control unit and a satisfied lift user.

HydroElite VENI is certified according to EN81-20/50 and has a common certificate for A3/UCM.

HydroElite® VIDI

With **HydroElite VIDI** the power demand and the energy consumption is dramatically reduced – up to 70 % compared to other systems with electronical or mechanical valves. Thanks to the possibility of slightly lowering the speed for trips upwards with higher loads, the power demand can be reduced as much as up to 70 % compared to other systems on the market. The use of highly efficient IE2 air cooled motors means that the energy consumption will be cut with another 20 %, compared to HydroElite Veni. The other advantages, thanks to the unique servo valve, are also experienced with the **HydroElite VIDI**.

HydroElite® MRL

HydroElite MRL is the machine room less option. Many aspects speak in favor of placing the drive and control system outside the shaft. The system cabinet only needs an area of 0.3-0.9 square meters somewhere in the building where the lift is located. The system cabinet does not have to be next to the lift.





ELEVANS

a passenger lift

ELEVANS is our passenger lift programme. Design is made to make the most space efficient and flexible solution possible, meeting modern standards and accessible requirements without sacrificing quality or performance.

ELEVANS is a complete solution fitted to your needs. The compact design enables smaller shaft measurement releasing valuable square metre of the building for better utilisation in new construction.

Cabin interior can be customised. We can also deliver a naked car for local interior delivery. For doors we have

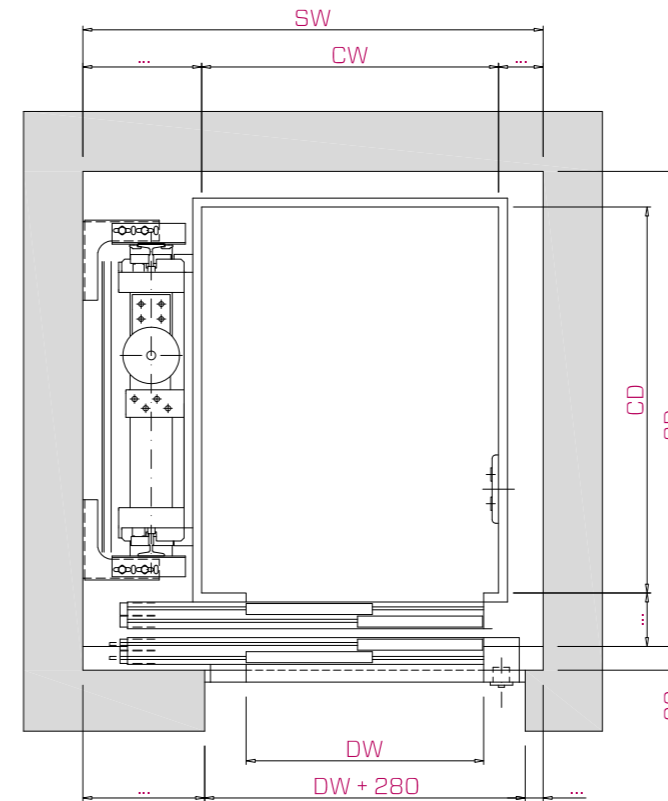
co-operation with leading suppliers, making us able to fulfil all requirements and local specifications.

Size and shape of cabin are flexible and with possibilities up to three cabin doors.

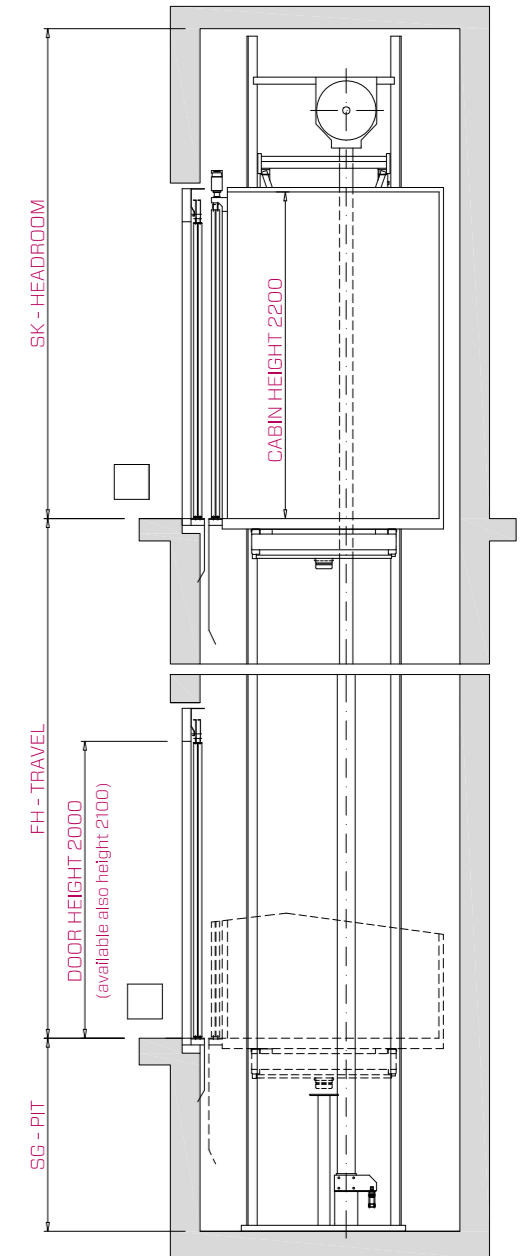
ELEVANS exists both as 1:1 direct and 2:1 indirect solution and can be equipped with both standard and telescopic pistons. Max speed is 1 m/s.

ELEVANS

dimensions one automatic door



All dimensions are stated in millimeters



LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD** DEPTH	SW WIDTH	SD** DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
6	450 Kg	950	1300	800	1500	1570	1400	1570	1000	3350	400	2500 *
8	630 Kg	1100	1400	900	1650	1670	1500	1670	1000	3350	400	2500 *
10	800 Kg	1100	1800	900	1650	2070	1500	2050	1000	3350	400	2500 *
13	1000 Kg	1100	2100	900	1650	2370	1500	2350	1000	3350	400	2500 *
19	1600 Kg	1400	2400	1200	2100	2670	1980	2650	1270	3350	800	2850
22	2000 Kg	1500	2500	1200	2150	2770	1990	2750	1270	3350	800	2850

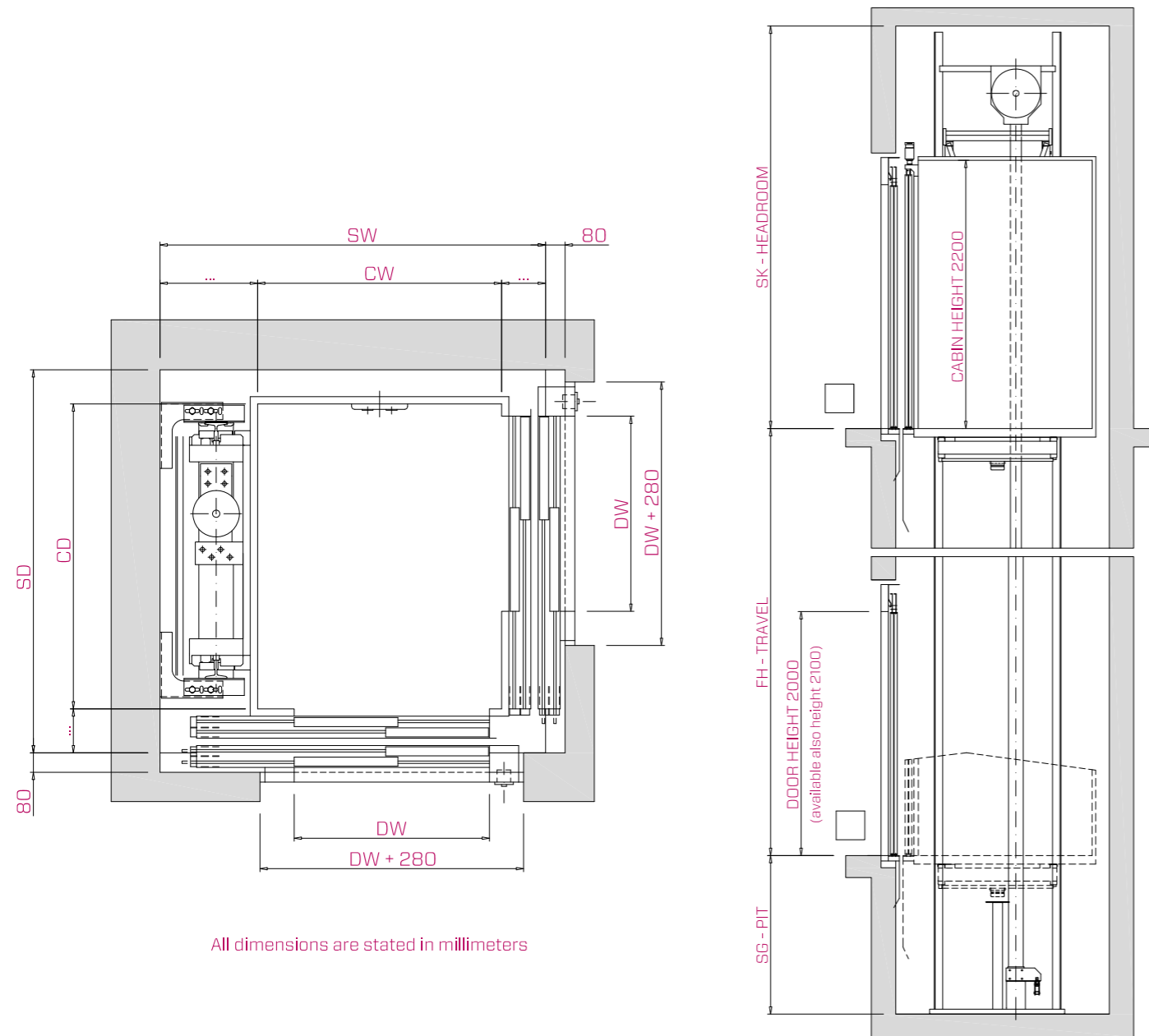
Note: the minimum shaft dimensions are with special guide rails brackets and special cabin frontal wall thickness

* solution with special height of car door drive / with doors height 2100mm the headroom dimension will increase by 100mm

** with landing doors installed without niches, this dimension will increase by 80mm

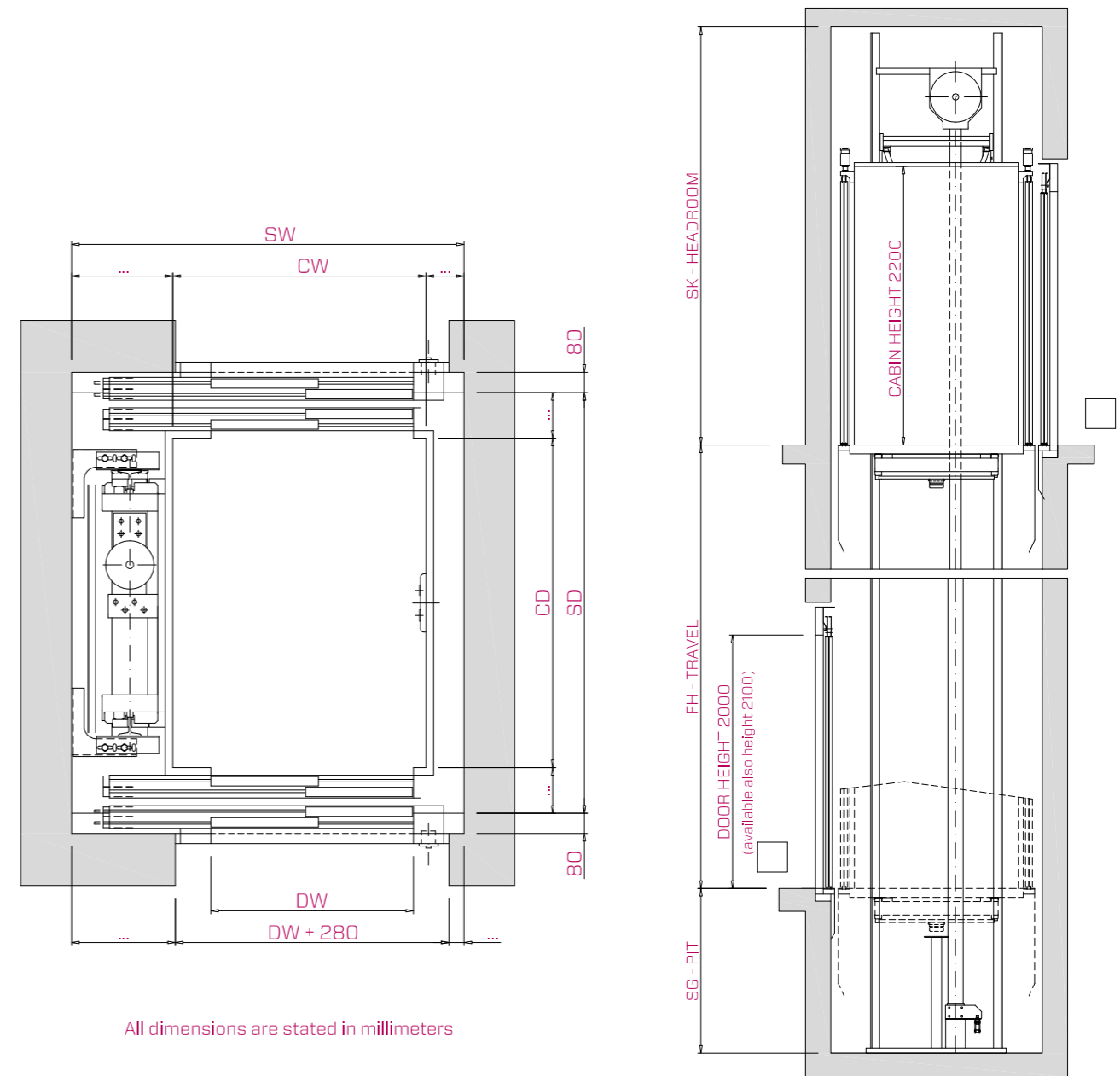
ELEVANS

dimensions two automatic doors 90°



ELEVANS

dimensions two automatic doors 180°



LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW** WIDTH	MINIMUM DIMENSIONS SD** DEPTH	SW** WIDTH	SD** DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
7	570 Kg	1200	1200	800	1790	1520	1740	1470	1000	3350	400	2500 *
9	930 Kg	1500	1500	900	2070	1820	2020	1770	1000	3350	400	2500 *
14	1050 Kg	1100	2100	900	1670	2420	1620	2370	1000	3350	400	2500 *
16	1250 Kg	1200	2300	1100	1880	2620	1820	2570	1000	3350	400	2500 *
21	1600 Kg	1400	2400	1300	2080	2720	2020	2680	1270	3350	800	2850
26	2000 Kg	1600	2500	1400	2280	2820	2220	2780	1270	3350	800	2850

Note: the minimum shaft dimensions are with special guide rails brackets and special cabin frontal wall thickness

* solution with special height of car door drive / with doors height 2100mm the headroom dimension will increase by 100mm

** with landing doors installed without niches, this dimension will increase by 80mm

LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD** DEPTH	SW WIDTH	SD** DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
6	450 Kg	950	1300	800	1500	1700	1400	1660	1000	3350	400	2500 *
8	630 Kg	1100	1400	900	1650	1800	1500	1760	1000	3350	400	2500 *
10	800 Kg	1100	1800	900	1650	2200	1500	2160	1000	3350	400	2500 *
13	1000 Kg	1100	2100	900	1650	2500	1500	2460	1000	3350	400	2500 *
19	1600 Kg	1400	2400	1200	2100	2800	1980	2760	1270	3350	800	2850
22	2000 Kg	1500	2500	1200	2150	2900	1990	2860	1270	3350	800	2850

Note: the minimum shaft dimensions are with special guide rails brackets and special cabin frontal wall thickness

* solution with special height of car door drive / with doors height 2100mm the headroom dimension will increase by 100mm

** with landing doors installed without niches, this dimension will increase by 160mm



FORTIS CAR a robust car lift

FORTIS CAR is our car lift programme. Material choices and design are based on lifts suitable for heavy duty application requiring the highest availability.

With our own design department, we are flexible and can customise a solution in each case. It also enables us to handle any parking garage, department store or private home in the most cost-efficient, sustainable and user-friendly manner possible.

FORTIS CAR exists both as 1:1 direct and 2:1 indirect solution and can be equipped with both standard and telescopic pistons.

Cabin interior, material, colour scheme and dimensions can all be customised to perfectly fit the intended use regardless if it is a public garage or private home.

Standard design is:

- Floor – checker plate stainless steel AISI304
- Walls – stainless steel AISI304 or painted
- Bumper rails – in selected material
- Gutter system
- LED-Lighting

FORTIS CAR lifts are equipped with heavy duty doors from recognised supplier.

FORTIS CARGO for heavy duty

FORTIS CARGO is our freight lift programme. Material choices and design are based on lifts suitable for heavy duty application requiring the highest availability.

With our own design department, we are flexible and can customise a solution in each case. It also enables us to handle any workshop, warehouse or industrial project in the most cost-efficient, sustainable and user-friendly manner possible.

FORTIS CARGO exists both as 1:1 direct and 2:1 indirect solution and can be equipped with both standard and telescopic pistons.

Cabin interior, material, colour scheme and dimensions can all be customised to perfectly fit the intended use. The integration of the robust car frame and the cabin makes the solution perfectly stable.

Standard design is:

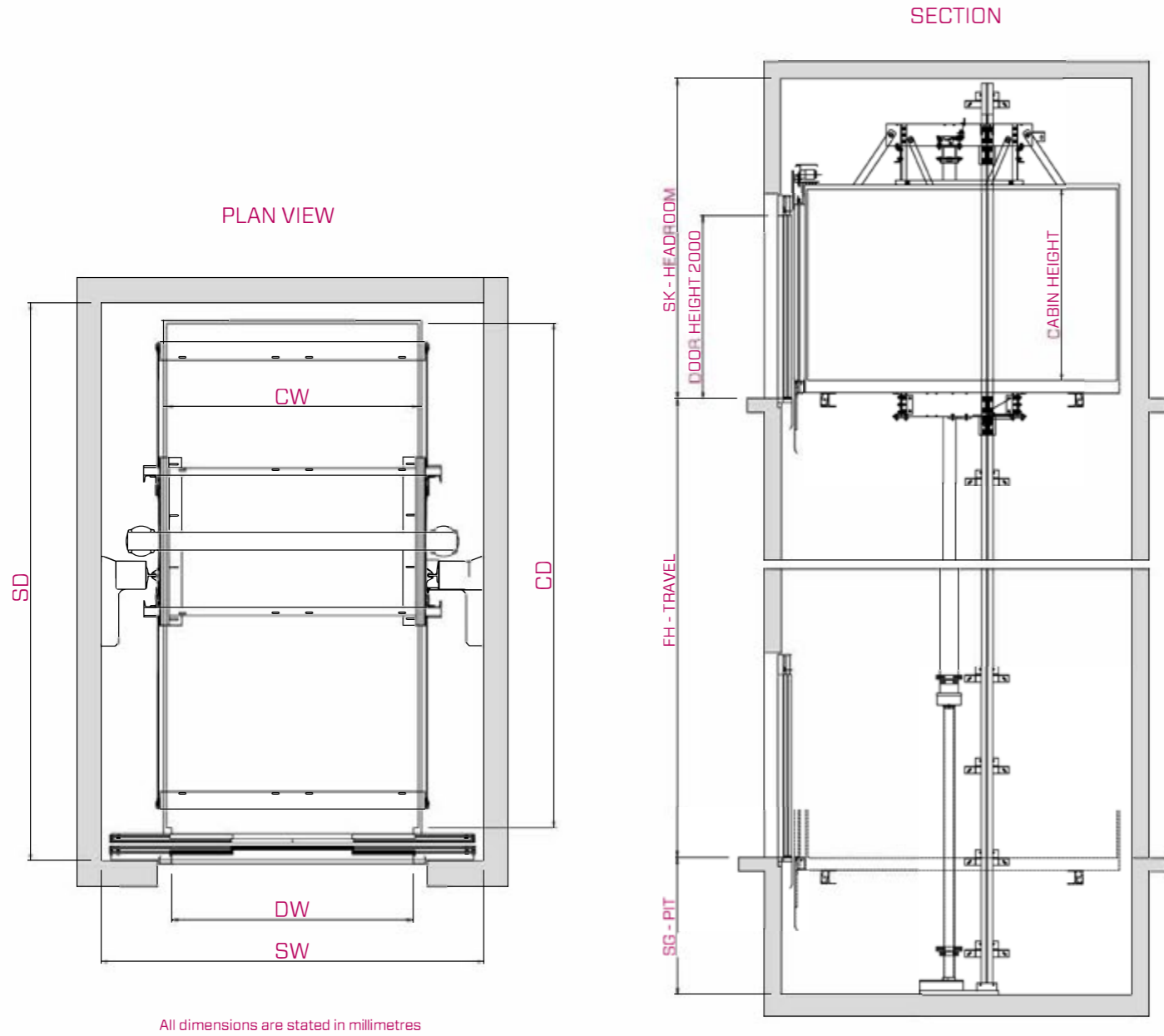
- Floor – checker plate stainless steel AISI304
- Walls – stainless steel AISI304 or painted
- Bumper rails – in selected material
- LED-Lighting

FORTIS lifts are equipped with heavy duty doors from recognised supplier. The doors have up to 6 panels to efficiently utilise the full width of the shaft.



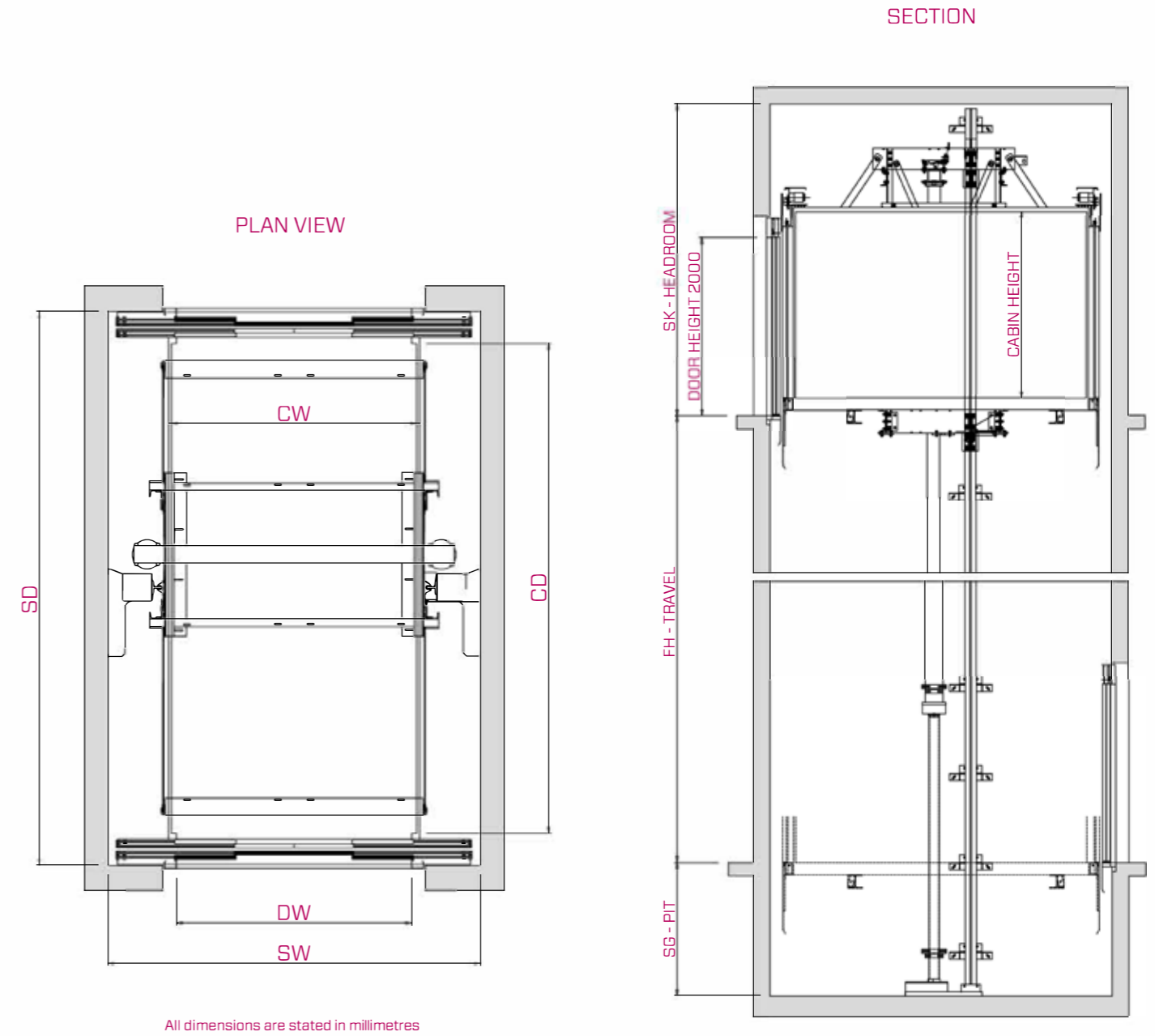
FORTIS CAR & CARGO

dimensions 1:1 and one automatic door



FORTIS CAR & CARGO

dimensions 1:1 and two automatic doors

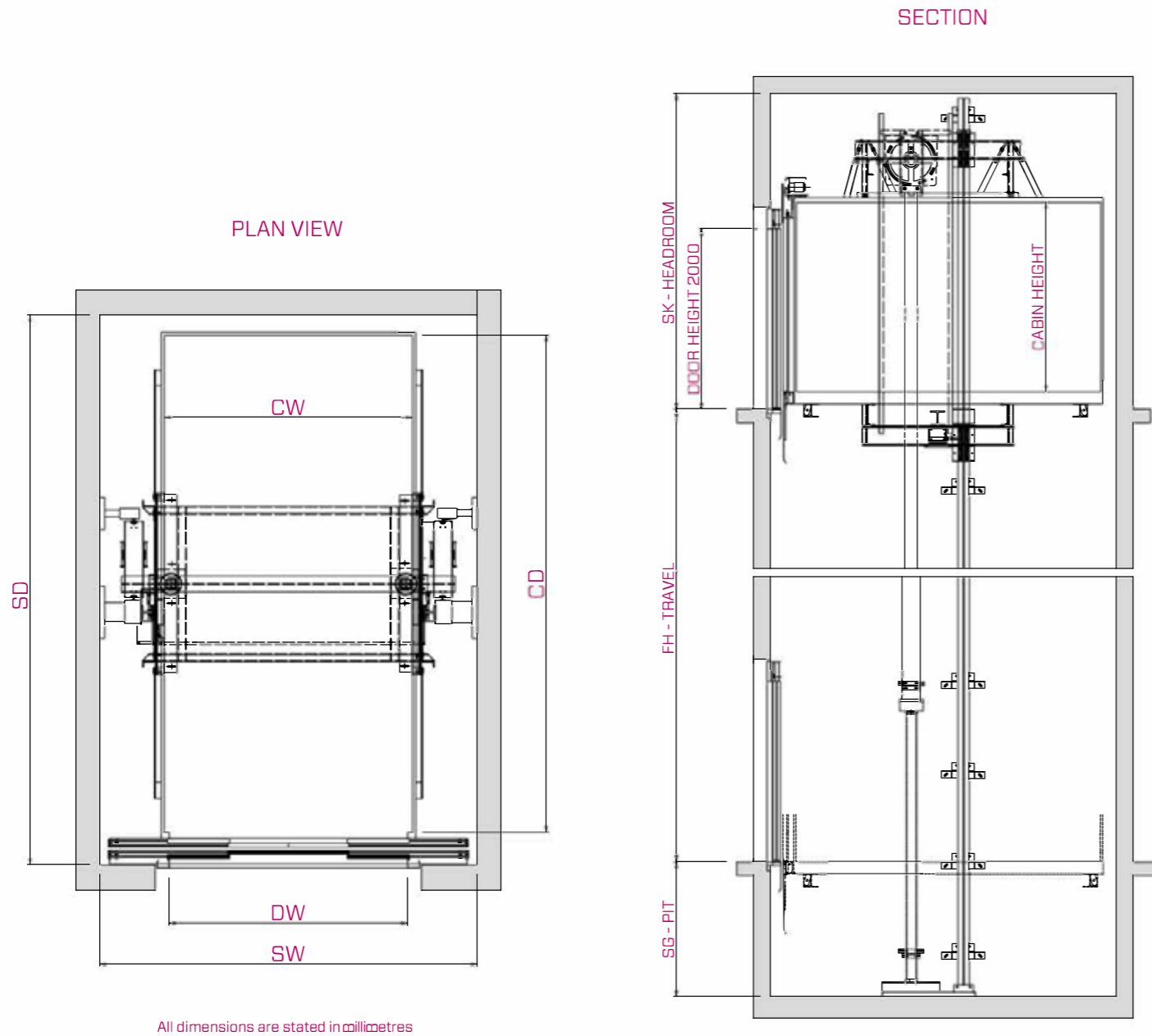


LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD DEPTH	SW WIDTH	SD DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
26	2000 Kg	1500	2700	1300	2200	3100	2160	3050	1050	3400	600	3000
53	4000 Kg	2200	3250	1800	2950	3650	2900	3600	1050	3700	650	3200
80	6000 Kg	2200	4800	1800	3000	5200	2960	5150	1100	3700	800	3400
133	10000 Kg	2800	6000	2300	3740	6400	3700	6350	1200	3700	800	3500

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		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD DEPTH	SW WIDTH	SD DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
26	2000 Kg	1500	2700	1300	2200	3260	2160	3260	1050	3400	600	3000
53	4000 Kg	2200	3250	1800	2950	3800	2900	3800	1050	3700	650	3200
80	6000 Kg	2200	4800	1800	3000	5350	2960	5350	1100	3700	800	3400
133	10000 Kg	2800	6000	2300	3740	6550	3700	6550	1200	3700	800	3500

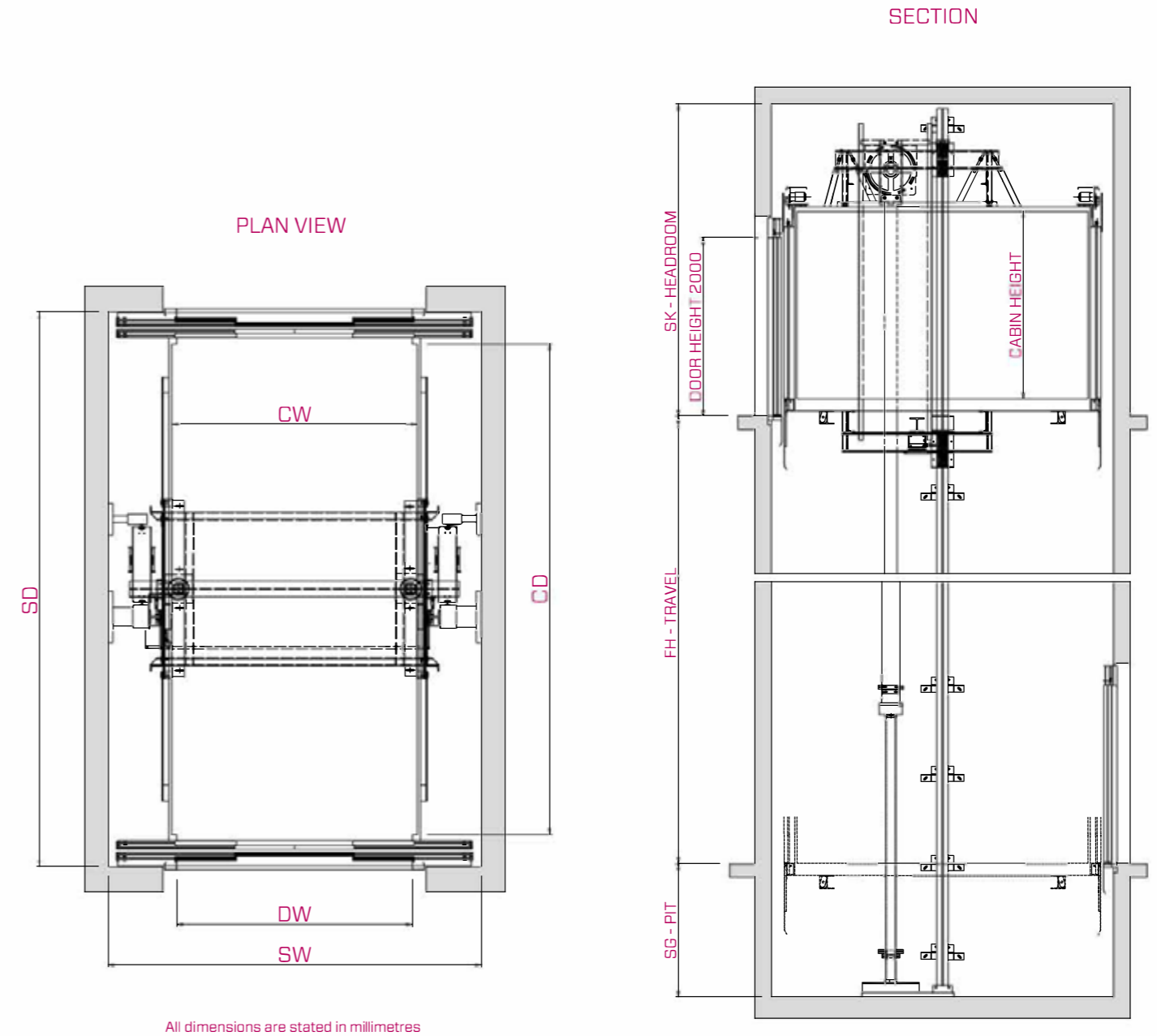
FORTIS CAR & CARGO

dimensions 2:1 and one automatic door



FORTIS CAR & CARGO

dimensions 2:1 and two automatic doors



LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS		MINIMUM DIMENSIONS		SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
					SW WIDTH	SD DEPTH	SW WIDTH	SD DEPTH				
26	2000 Kg	1500	2700	1300	2200	3100	2160	3050	1200	3400	750	3000
53	4000 Kg	2200	3250	1800	3000	3650	2960	3600	1300	3700	800	3200
80	6000 Kg	2200	4800	1800	3140	5200	3100	5150	1300	3700	1000	3400
133	10000 Kg	2800	6000	2300	3840	6400	3800	6350	1500	3700	1000	3500

LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS		MINIMUM DIMENSIONS		SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
					SW WIDTH	SD DEPTH	SW WIDTH	SD DEPTH				
26	2000 Kg	1500	2700	1300	2200	3260	2160	3260	1200	3400	750	3000
53	4000 Kg	2200	3250	1800	3000	3800	2960	3800	1300	3700	800	3200
80	6000 Kg	2200	4800	1800	3140	5350	3100	5350	1300	3700	1000	3400
133	10000 Kg	2800	6000	2300	3840	6550	3800	6550	1500	3700	1000	3500

MIGRO

for narrow spaces

MIGRO is our passenger lift programme for narrow spaces. Design is made to make the most space efficient solution possible meeting modern standards and accessible requirements without sacrificing quality or performance.

With our own design department, we are flexible and can customise a solution in each case including tailored shaft solutions. It enables us to handle any residential building, private home or other project in need of a new lift or replacement of an existing lift where space is critical.

The compact design makes it perfect for replacement of any outdated malfunctioning existing lift without high cost adaption of existing shaft, or for installation of a new lift in an existing building.

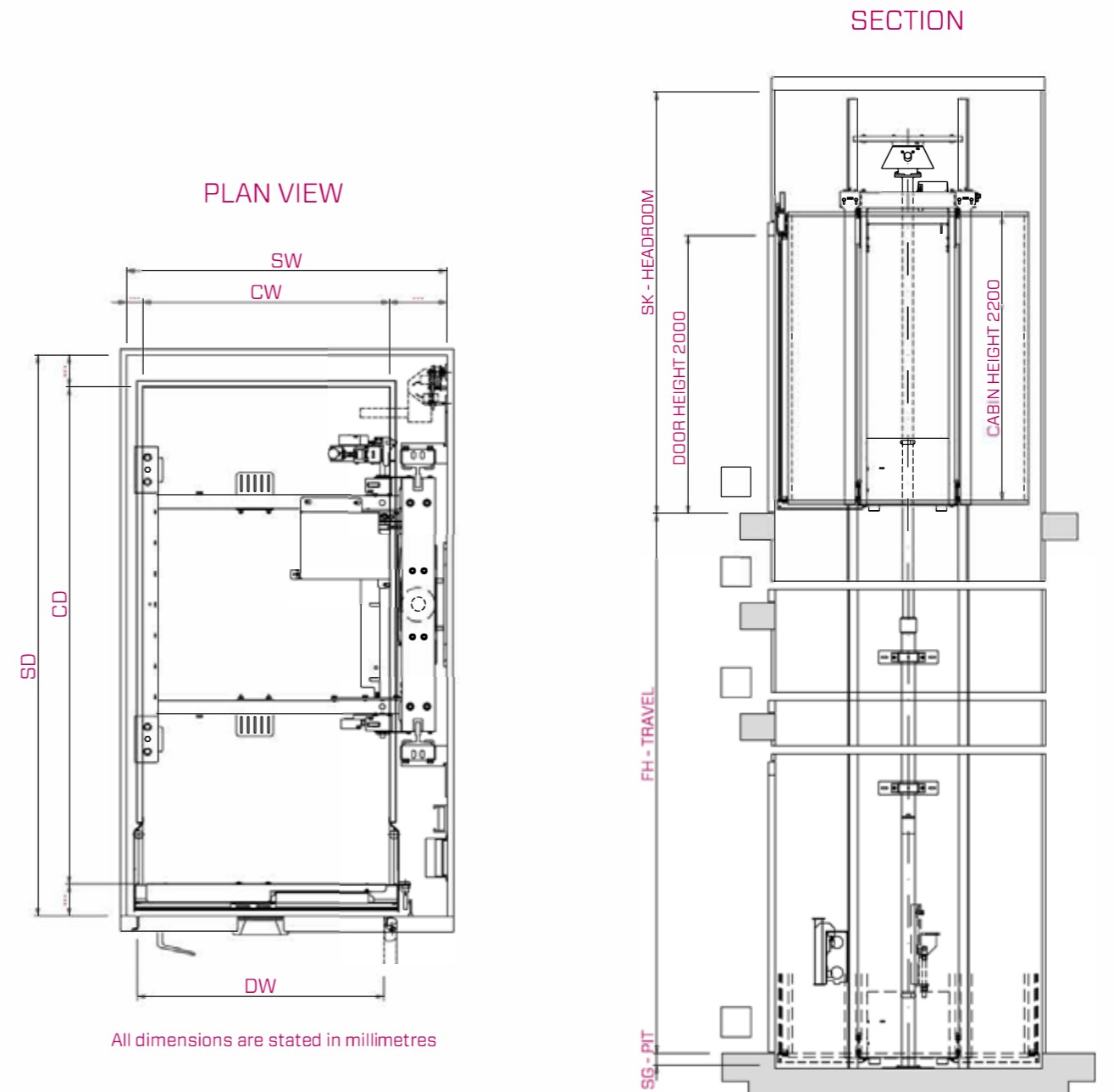
Cabin interior can be customised. For doors we can deliver both bus doors combined with hinged doors or fully automatic doors.

MIGRO exists as 2:1 indirect solution and max speed is 0,63 m/s.



MIGRO

dimensions one semi-automatic door



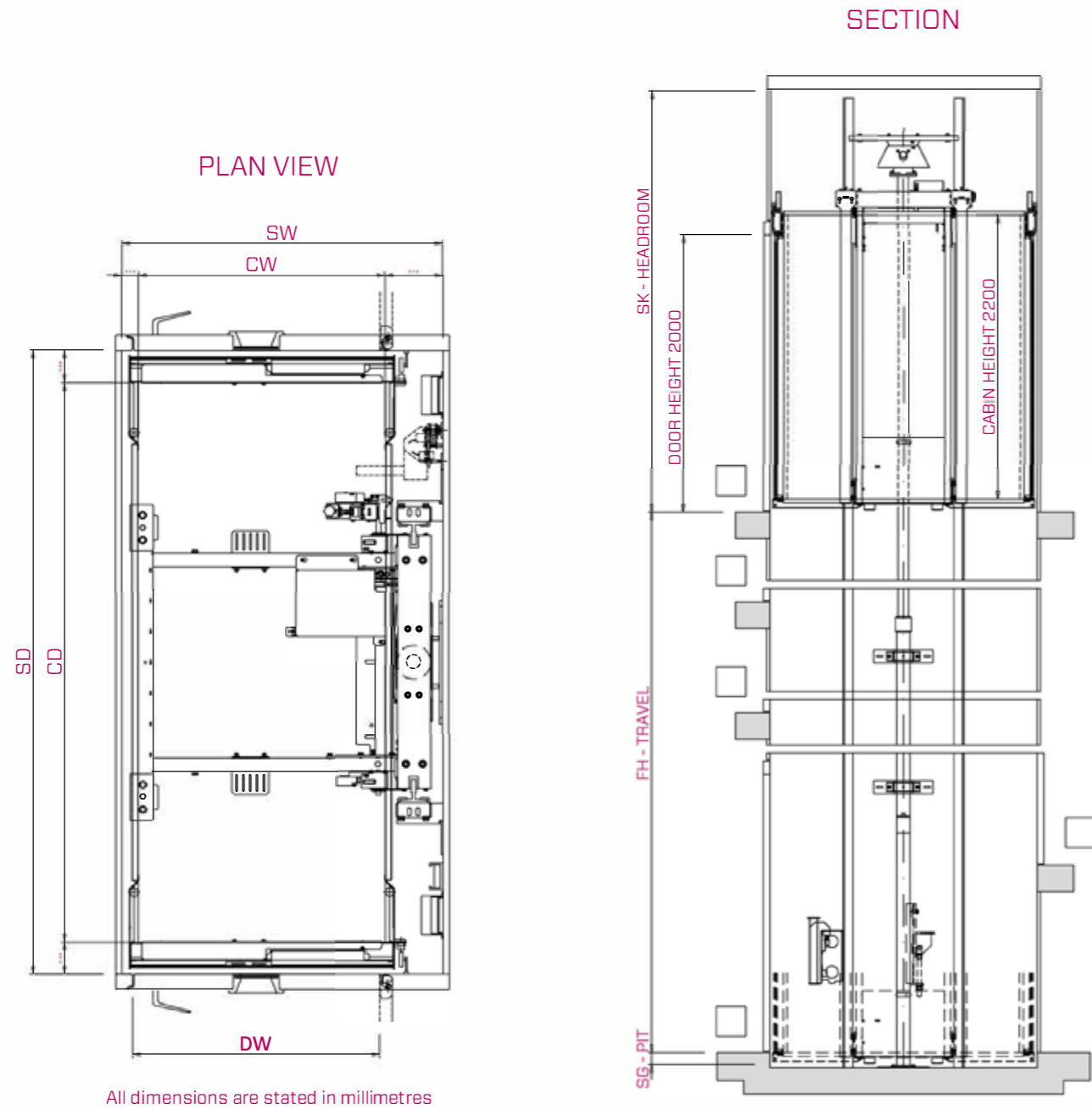
All dimensions are stated in millimetres

LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	SD DEPTH	MINIMUM DIMENSIONS SW WIDTH	SD DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
4	350 Kg	800	1200	800	1040	1380	1000 *	1380	950	3310	>100	2500
6	450 Kg	1000	1300	800	1240	1480	1220	1480	950	3310	>100	2500
8	630 Kg	1100	1400	900	1340	1580	1320	1580	950	3310	>100	2500
10	800 Kg	1000	2000	900	1240	2180	1220	2180	950	3310	>100	2500
13	1000 Kg	1100	2100	900	1380	2280	1360	2280	950	3310	>100	2500

* to be checked according to piston diameter dimension

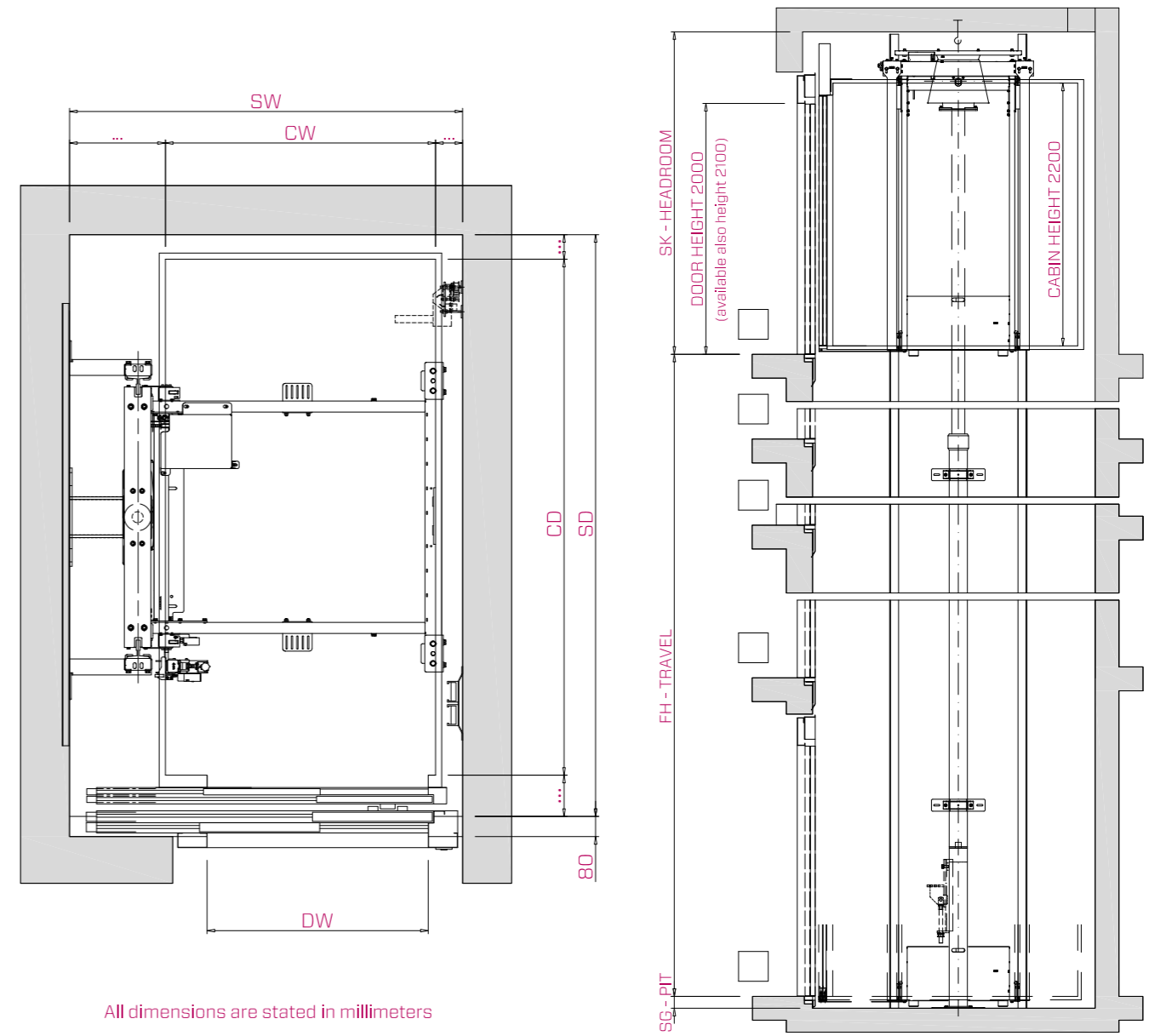
MIGRO

dimensions two semi-automatic doors



MIGRO

dimensions one automatic door



LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD DEPTH	SW WIDTH	SD DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
4	350 Kg	800	1200	800	1040	1400	1000*	1400	950	3310	>100	2500
6	450 Kg	1000	1300	800	1240	1500	1220	1500	950	3310	>100	2500
8	630 Kg	1100	1400	900	1340	1600	1320	1600	950	3310	>100	2500
10	800 Kg	1000	2000	900	1240	2200	1220	2200	950	3310	>100	2500
13	1000 Kg	1100	2100	900	1380	2300	1360	2300	950	3310	>100	2500

* to be checked according to piston diameter dimension

LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD** DEPTH	SW WIDTH	SD** DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
4	350 Kg	800	1200	800	1500	1470	1450	1440	950	3310	>100	2500*
6	450 Kg	1000	1300	800	1500	1570	1450	1540	950	3310	>100	2500*
8	630 Kg	1100	1400	900	1600	1670	1600	1640	950	3310	>100	2500*
10	800 Kg	1000	2000	900	1600	2270	1600	2240	950	3310	>100	2500*
13	1000 Kg	1100	2100	900	1600	2370	1600	2340	950	3310	>100	2500*

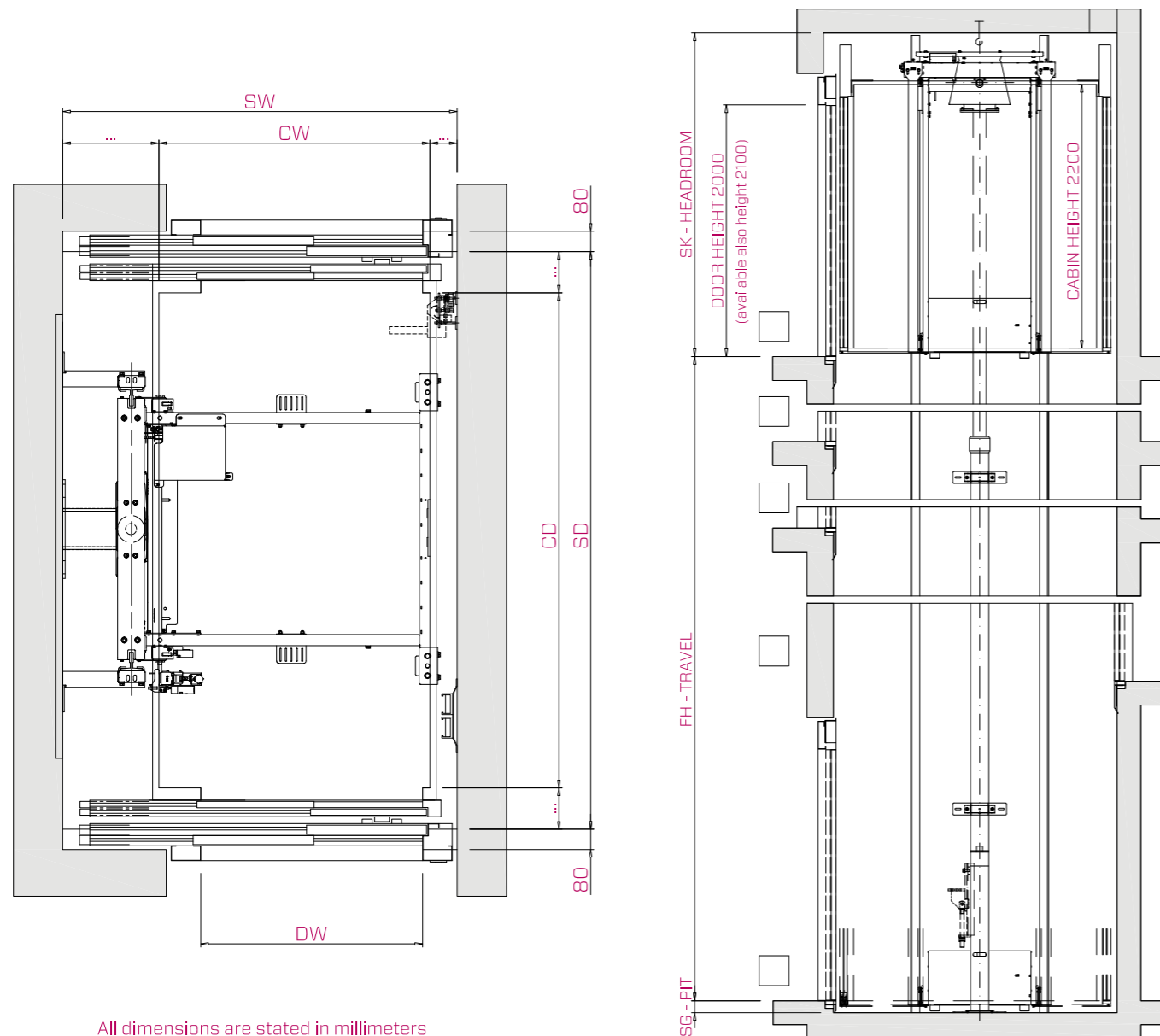
Note: the minimum shaft dimensions are with special guide rails brackets and special cabin frontal wall thickness

* solution with special height of car door drive / with doors height 2100mm the headroom dimension will increase by 100mm

** with landing doors installed without niches, this dimension will increase by 80mm

MIGRO

dimensions two automatic doors



All dimensions are stated in millimeters

LOAD / CAPACITY		LIFT SHAFT										
		STANDARD CABIN DIMENSIONS			DIMENSION SHAFT				EN 81-20		EN 81-21	
PERSONS	Q LOAD	CW WIDTH	CD DEPTH	DW CLEAR OPENING	STANDARD DIMENSIONS SW WIDTH	MINIMUM DIMENSIONS SD** DEPTH	SW WIDTH	SD** DEPTH	SG PIT	SK HEADROOM	SG PIT	SK HEADROOM
4	350 Kg	800	1200	800	1500	1590	1450	1560	950	3310	>100	2500 *
6	450 Kg	1000	1300	800	1500	1690	1450	1660	950	3310	>100	2500 *
8	630 Kg	1100	1400	900	1600	1790	1600	1760	950	3310	>100	2500 *
10	800 Kg	1000	2000	900	1600	2390	1600	2360	950	3310	>100	2500 *
13	1000 Kg	1100	2100	900	1600	2490	1600	2460	950	3310	>100	2500 *

Note: the minimum shaft dimensions are with special guide rails brackets and special cabin frontal wall thickness

* solution with special height of car door drive / with doors height 2100mm the headroom dimension will increase by 100mm

** with landing doors installed without niches, this dimension will increase by 160mm

Engineering expertise: Your partner from quotation to maintenance

At Hydroware you are buying more than just a product. Automatically you get access to our extensive practical experience in customising new lifts according to project conditions. From measurement to approval and certification, it is great to have experienced engineers by your side.

We provide online support, over the phone or onsite, for example with:

- Telephone support or On-site support from experienced staff specialised in hydraulic lifts

- Special control options or functions from software developers in project development
- Flexible processing options for complex projects, such as double pistons, high lifting capacities and severe space constraints
- Technical consultation and quotation
- Special system construction with qualified suppliers
- Documentation and certification for distribution online



Quick Installation: Wireless installation handle

If you use the option with Hydroware's wireless installation handle, you can control the lift wirelessly from the cabin roof. An installation run can be carried out as soon as the new unit is placed and connected to the power supply. An installation run does not require shaft installation or connected bridges, which means there is no annoying wiring or restricted mobility. This makes the installation even quicker!

Wireless installation handle can be set for each HydroElite installation.



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