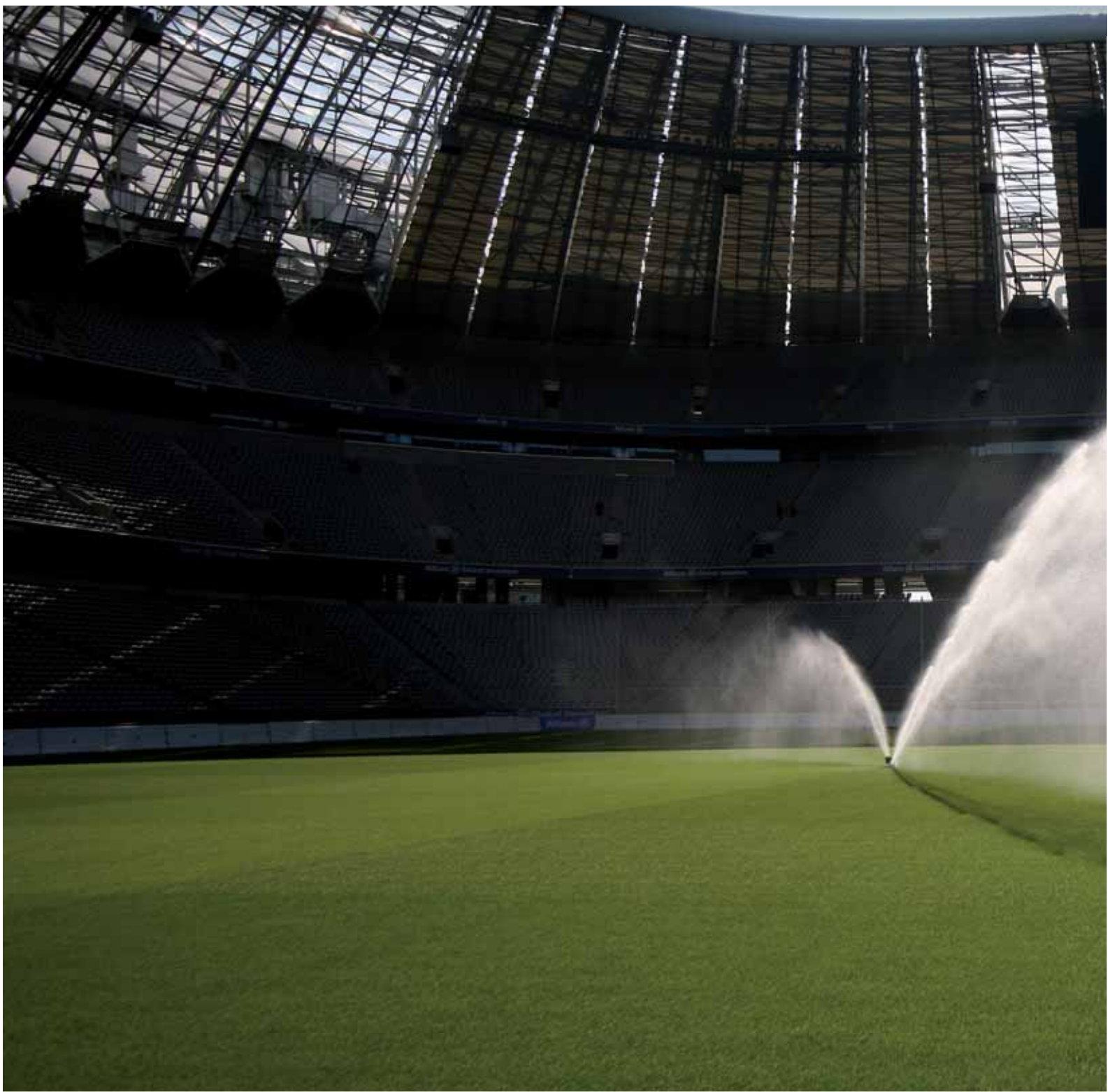
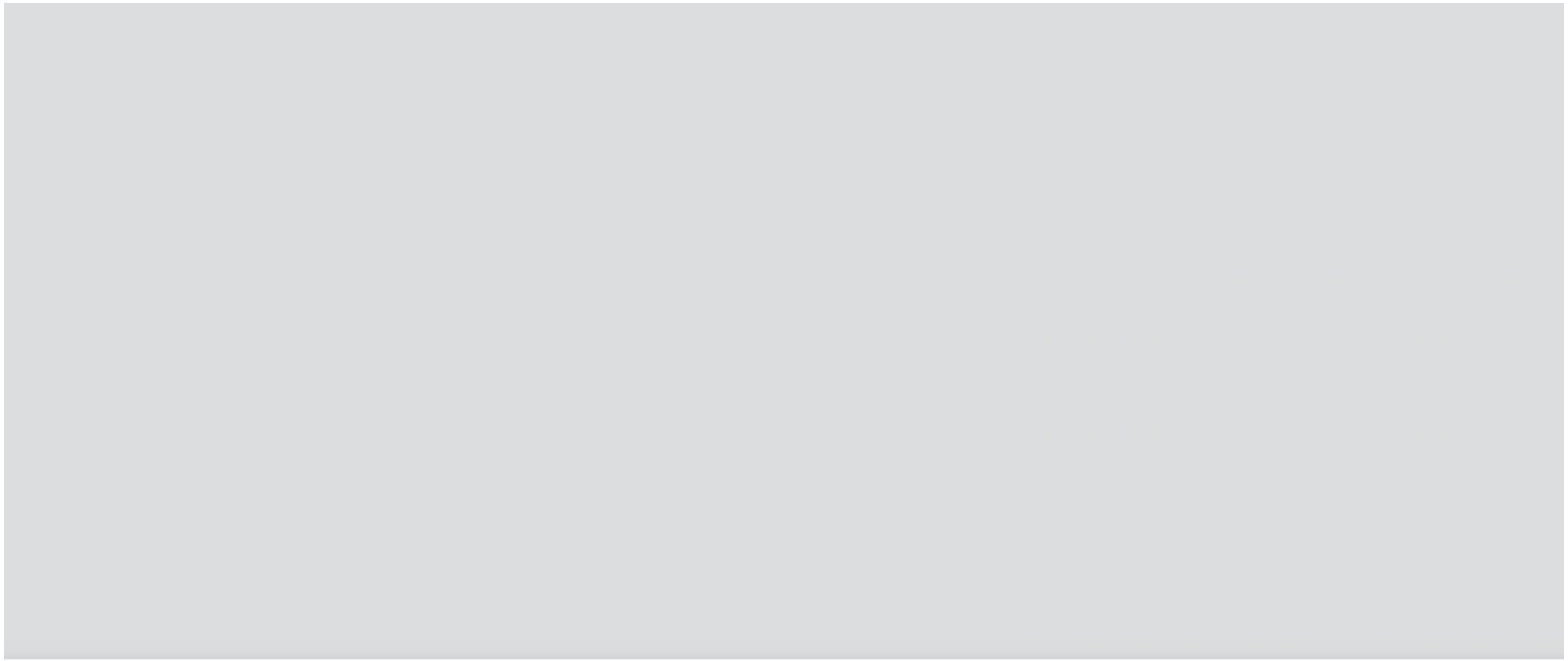


**The Professionals of
Turf Irrigation
Die Spezialisten für
Rasenberegung**



**Irrigation systems for
sports fields**



**PERROT provides RAIN in more ways
than the heavens**





PERROT-Pop-up sprinkler



PERROT pop-up sprinklers – high performance – easy to operate – economical

PERROT sprinklers are available with two different mechanisms. You can either choose impact or gear drive sprinklers – both techniques have been developed to perfection. Once installed PERROT irrigation systems will render a good service for many years.

The part circle sprinklers installed at the sidelines are infinitely adjustable and can be set to any sector of a circle. The midfield sprinklers are a class of their own: the lid can resist all kinds of strains and is covered with an artificial turf layer, thus making it insensitive to studs. The natural sod cup of the RVR series even matches the playing surface = natural turf. At pressures of 3 to 7 bar the sprinklers have a casting range of 19 to 36,6 m with supplemented by an outstanding water distribution. The short rotation speed of less than a minute is a unique feature – allowing a quick irrigation during intermission.

The high performance sprinkler VP2 has been developed to irrigate artificial turf pitches from the sidelines, without sprinklers inside the playing area. The world's first and only pop-up sprinkler with piston drive and a casting range of more than 50m.

Easy-to-maintain design: Only a few screws have to be loosened and the sprinkler insert can be taken out of the housing without the need for digging. Leading to merely short interruptions of the irrigation during dry seasons and no damage to the lawn. Should there, however, be a breakdown – all parts of our PERROT sprinklers are also available as spare parts. 18 customer service stations in Germany and distribution partners in more than 80 countries worldwide are at your disposal.

LVZR/RVR

Nozzle variations ___ 7-17,5 mm
Operating pressure ___ 3,0-7,0 bar
Casting range ___ 19-36,5 m
Flow rate ___ 4,3-27,1 m³
Trajectory ___ 22°
Inlet ___ 1 1/2" female thread

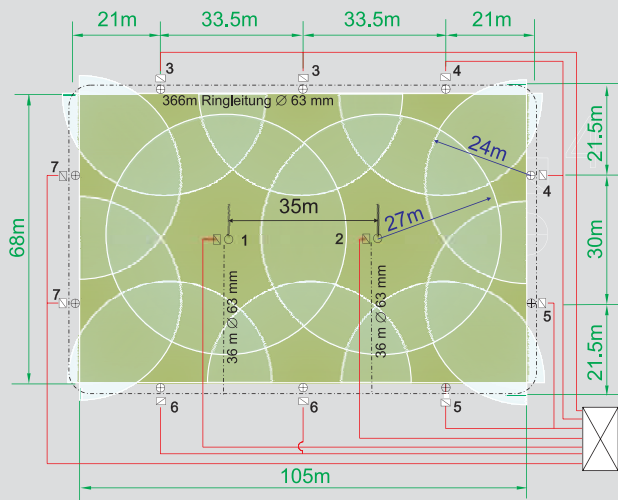
HYDRA L

Nozzle variations ___ 7,0-14 mm
Operating pressure ___ 4,0-7,0 bar
Casting range ___ 21,0-32 m
Flow rate ___ 5,2-23,2 m³
Trajectory ___ 25°
Inlet ___ 1 1/2" female thread
 inlet bushing made of brass

VP2M

Nozzle variations ___ 16-26 mm
Operating pressure ___ 4,0-8,0 bar
Casting range ___ 32-53 m
Flow rate ___ 22-75 m³
Trajectory ___ 25°
Inlet ___ 2 1/2" female thread
 inlet bushing made of brass

Layout sports field irrigation system - Impact or Gear Drive Valve-in-Head Pop-up Sprinklers



Irrigation sequence:

- 7 irrigation sections
- 2 sprinklers each at the sidelines
- or one sprinkler in the centre of the field

Flow rate:

- 1 sprinkler at the sidelines $Q = 9,5 \text{ m}^3/\text{h}$
- 1 sprinkler in the centre of the field $Q = 18,0 \text{ m}^3/\text{h}$
- Max. flow rate per irrigation section $Q = 19,0 \text{ m}^3/\text{h}$

Operating pressure:

- Pressure at the sprinkler nozzle $H = 5,5 \text{ bar}$
- Required flow pressure at the connecting terminal for a water intake of $20 \text{ m}^3/\text{h}$ $H = 7,0 \text{ bar}$

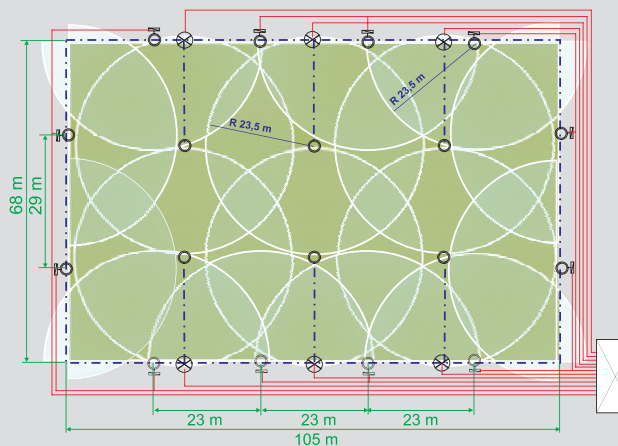
Precipitation:

- Average precipitation density $2,5 \text{ mm}/\text{h}$

No. of sprinklers:

- Lateral sprinklers: LVZR 22 WVAC/HYDRA-L WSVAC 10 pcs
- Midfield sprinklers: LVZR 22 SVAC/HYDRA-L SVAC 2 pcs

Layout sports field irrigation system - Impact Valve-in-Head Pop-up Sprinklers



Irrigation sequence:

- 12 irrigation sections
- 2 sprinklers each at the sidelines
- or one sprinkler in the centre of the field

Flow rate:

- 1 sprinkler at the sidelines $Q = 9,5 \text{ m}^3/\text{h}$
- 1 sprinkler in the centre of the field $Q = 18,0 \text{ m}^3/\text{h}$
- Max. flow rate per irrigation section $Q = 19,0 \text{ m}^3/\text{h}$

Operating pressure:

- Pressure at the sprinkler nozzle $H = 5,5 \text{ bar}$
- Required flow pressure at the connecting terminal for a water intake of $20 \text{ m}^3/\text{h}$ $H = 7,0 \text{ bar}$

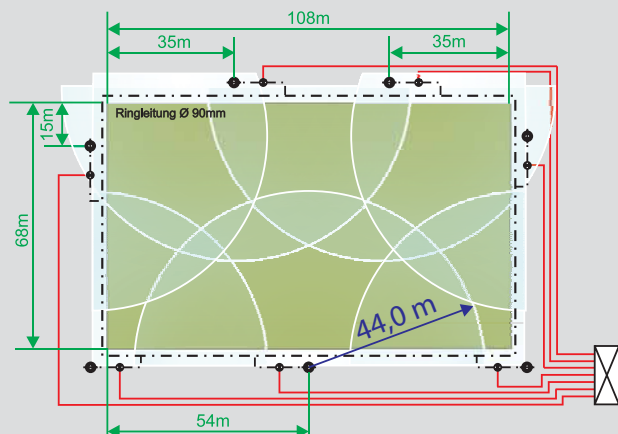
Precipitation:

- Average precipitation density $2,5 \text{ mm}/\text{h}$

No. of sprinklers:

- Lateral sprinklers: LVZR 22 WVAC 12 pcs
- Midfield sprinkler: RVR-VAC 6 pcs

Layout Irrigation System for Artificial Turf Pitches - Piston drive Pop-up Sprinklers with Separate Solenoid Valve



Irrigation sequence:

- 7 irrigation sections

Flow rate:

- 1 sprinkler at the sidelines $Q = 39 \text{ m}^3/\text{h}$
- Max. flow rate per irrigation section $Q = 39 \text{ m}^3/\text{h}$

Operating pressure:

- Pressure at the sprinkler nozzle $H = 8,0 \text{ bar}$
- Required flow pressure at the connecting terminal for a water intake of $20 \text{ m}^3/\text{h}$ $H = 10,0 \text{ bar}$

Precipitation:

- Average precipitation density $7,0 \text{ mm}/\text{h}$

No. of sprinklers:

- Full and part circle sprinkler VP2M - 18 mm 7 pcs



Controller



Controllers of the PERROT – Water Control series

PERROT-controllers are extremely versatile in application. The basic unit with an output voltage of 24V is equipped with two stations. It can be extended in two-station-modules to a maximum of 12 stations. Our controllers use state-of-the-art digital technology and can control the irrigation system according to your requirements.

The irrigation programmes offer individual control of selected stations from 1 to 99 minutes. Irrigation pauses of up to 99 seconds between the individual stations can be entered. It can store up to three different programs. Four automatic program starts are possible per day which can be programmed for one week in advance. The manual start allows you to trigger a program or only selected stations immediately. Every module features lightning protective capacitors in order to protect the print board. Large LCD display with self-explanatory symbols facilitates programming. The main valve, rain sensor and 24 VAC can be connected permanently. Output power 300 mA at 24VAC permanently. Connecting terminal 240/50 Hz.

For further information please ask for a separate spec sheet.

Solenoid valves of the PERROT MVR series

- Solenoid valve made of brass
- Available in three sizes - 1"; 1 ½"; 2"
- Kv-value: 12 m³/h - 22 m³/h - 37 m³/h
- Power supply 24V AC / 2 Watt
- Insensitive to dirt due to self cleaning backwash filter with internal bleed
- Manual control ON/OFF/AUTO
- Drainage valve on discharge side
- Operating pressure 12,5 bar
- Optionally with pressure compensated pressure regulation
- Available also with flow sensor for bi-directional computer control system "Greenkeeper-Feedback"

MVR 3"

- Solenoid valve made of cast iron, varnished
- Available in 3" female thread
- Kv-value 72 m³/h
- Power supply 24 VAC/4 Watt
- Separate filter for control water
- Manual control ON/OFF/AUTO
- Drainage valve on discharge side
- Operating pressure 10 bar

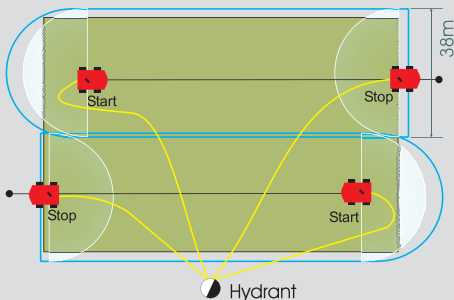
Mobile irrigation



RollcarT

moves and sprinkles independently. For the use on large green areas, sports facilities, nurseries and gardens.

Powered by water, the ROLLCART-V pulls itself along a nylon cable and automatically shuts down when it reaches the end of it. The infinitely variable speed regulation permits full control of the amount of water appropriate for the actual need.



Technical data

Traveling speed: _____ 10 bis 20 m/h
 Operating pressure: _____ 3,5 bar at the unit
 Flow rate: _____ 3,0 m³/h
 Width of irrigation: _____ 28 bis 36 m
 Length of irrigation: _____ 120 m
 Material: _____ Alu, brass, durable engineering plastic
 Dimensions: _____ 77 x 47 x 40 cm
 Weight: _____ 27,0 kg



HoseCar

For proper storage and safe transport of the hose:

The robust hose reel is a PERROT quality product, made of powder coated steel. Removable handle (smaller volume for storage and transport).

Connection with 1" brass coupling. Width of the reel 390 mm with water passage.

Connection at the reel with 1" brass coupling. Max. capacity 100 m 1" hose, reeled in layers. Two pneumatic plastic tyres.

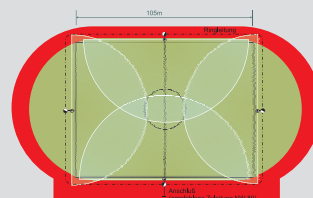
Hose length: _____ 100 m
Net weight: _____ approx. 24,0 kg
Dimensions: _____ 75 x 75 x 80 cm

Application: private gardens, parks, sports facilities and horticulture.



Sprinkler on tripod

Large area sprinkler on tripod. Connection to tripod with Storz C coupling, PERROT male part KKV or 2" male thread. Sprinkler connection 2 1/2" or 3". Suitable for large area sprinklers type P2-S or ZN 23W with a casting range of up to 40 m at 7 bar, flow rate up to 20 m³/h.





www.perrot.de

Extract of references

- | | |
|---|--|
| D- Allianz-Arena, München | A- Red Bull Arena Salzburg |
| D- HSH Nordbank Arena, Hamburg | CH- Stadium St. Gallen |
| D- Mercedes Benz Arena, Stuttgart | CN- Hockey Fields Olympic Green 2008 |
| D- Stadion im Borussia-Park, Mönchengladbach | CZ- Eden Stadium, Slavia Praha |
| D- Rhein-Neckar-Arena (TSG Hoffenheim), Sinsheim | GR- Sports Complex Olympiakos Piraeus, Athens |
| D- Ernst-Grube-Stadion, Magdeburg | IR- Azadi Olympic Athletic Stadium, Teheran |
| D- Sportanlagen der Stadt Dortmund | PE- Estadio Nacional de Lima |
| D- Carl-Benz-Stadion, Mannheim | PL- National Stadium Warsaw |
| D- Stadion SV Ulm | SRB- FK Crvena Zvezda (Red Star), Belgrade |
| D- HC Raffleberg, Duisburg (Hockeyplatz) | TR- Sükrü Saracoglu Stadium(Fenerbahce)Istanbul |
| D- Warsteiner Hockeypark, Mönchengladbach | UA- Donbass Arena, Donetsk |
| D- HSB Heidenheim (Hockeyplatz) | UK- Bisham Abbey National Sports Center |
| D- Hamburg Flottbeck (Hockeyplatz) | ZA- Moses-Mabhida-Stadium, Durban |



Perrot Regnerbau Calw GmbH
Industriestraße 19-29
D-75382 Althengstett
Tel. ++49(0)7051/162-0
Fax ++49(0)7051/162-133
E-mail: perrot@perrot.de
www.perrot.de