# THE PROFESSIONALS OF IRRIGATION



# **PERROT** stands for professional irrigation, with state-of-the-art technology for agriculture. Since 1925!

The responsible use of water resources is the driving force behind innovations at PERROT. Our unique products are not only environmentally-friendly but also durable and cost-effective.



Climate conditions are putting farmers under pressure, making irrigation systems ever more

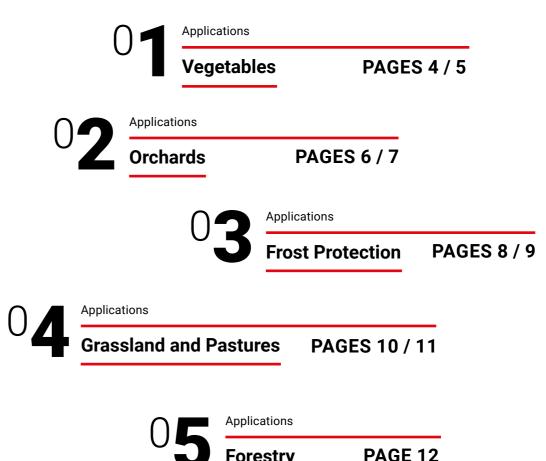
Maximum growth with minimum water consumption.

indispensable. So choosing the right irrigation system plays a crucial role to remain cost-effective. Soiled sprinklers which clog

and fail to deliver are probably the last straw in these demanding times. This is why PERROT inspires farmers with their 'Made in Germany' quality. Robust, durable and flexible: our customers have been noticing these qualities since we started our adventure in irrigation, in 1925. With future-focused cutting-edge technology, PERROT is the ideal partner for anyone seeking a long-term solution to their irrigation challenges.

Thanks to our skills and experience, gained from almost 100 years in the design and development of irrigation systems, **PERROT** is your guarantee for optimum working conditions.



















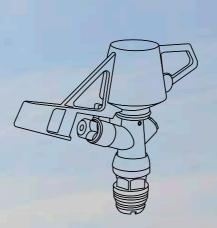


**PAGES 20-25** 

O Applications
VEGETABLES

# The greater the area, the greater the benefit

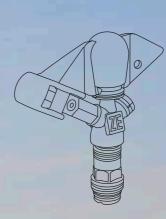
Robust and durable solutions with a complete PERROT irrigation system, from sprinklers to fully galvanized piping.



Impact sprinkler

**ZB 22** 

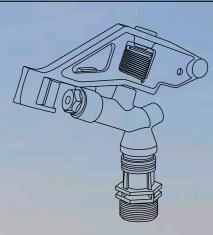
Casting range: 14.5-17.8 m



Impact sprinkler

**ZE 30** 

Casting range: 14.0-21.8 m

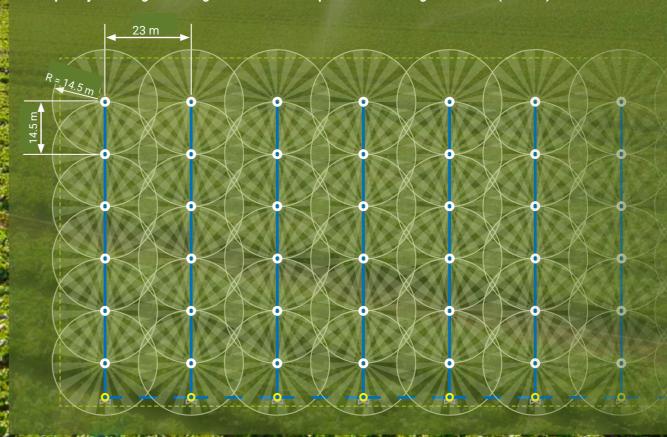


Impact sprinkler

**ZM 22** 

Casting range: 23.3-34.5 m

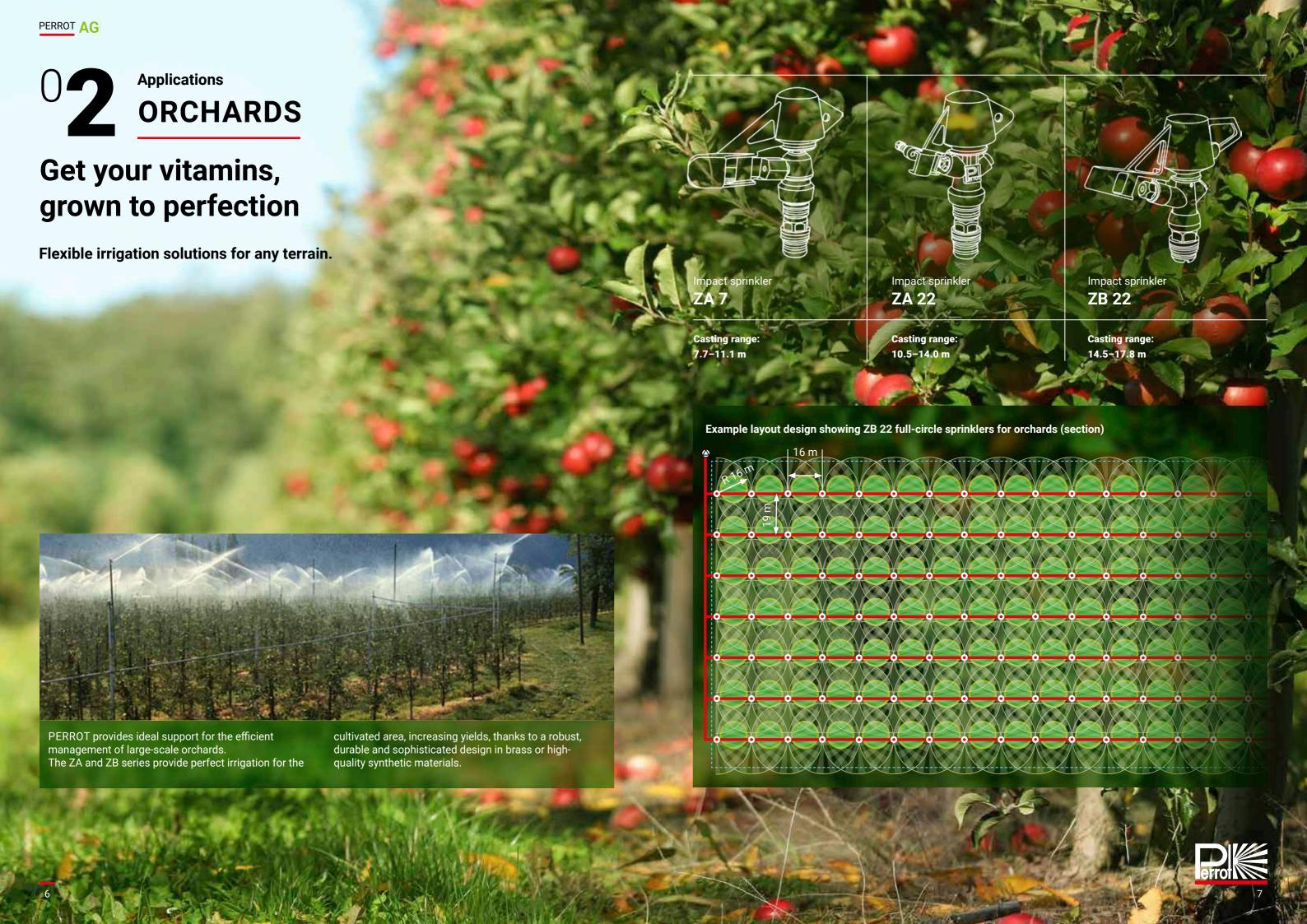
Example layout design showing ZE 30 full-circle sprinklers for a vegetable field (section)



In agriculture, the wind and weather take their toll on both people and materials. This is why PERROT irrigation systems are designed for robustness, durability and reliability.

Thanks to our range of connection sizes, from  $^{1}/_{2}$  to  $1^{1}/_{2}$  inches and various casting ranges, the PERROT irrigation system has built-in flexibility, enabling our systems to adapt to a huge variety of different circumstances.





# 3 Applications FROST PROTECTION

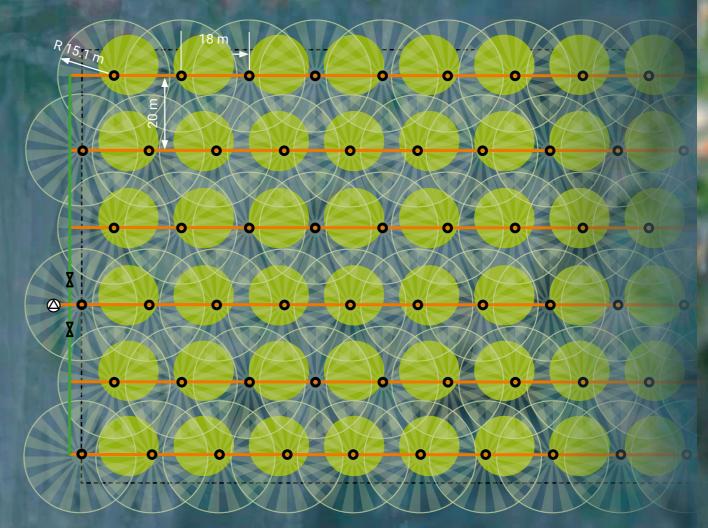
A sprinkler that neither freezes nor rusts

For maximum reliability in the most sensitive growth phase.

Nowhere is a reliable irrigation system more in demand than in frost protection. Thanks to specially adapted impact technology, PERROT ZS sprinklers can be relied upon and function perfectly at temperatures even as low as -10 degrees, without freezing. This ensures an even and low-consumption allocation of water even over long periods of hours. Impact sprinkler **ZS 30** 

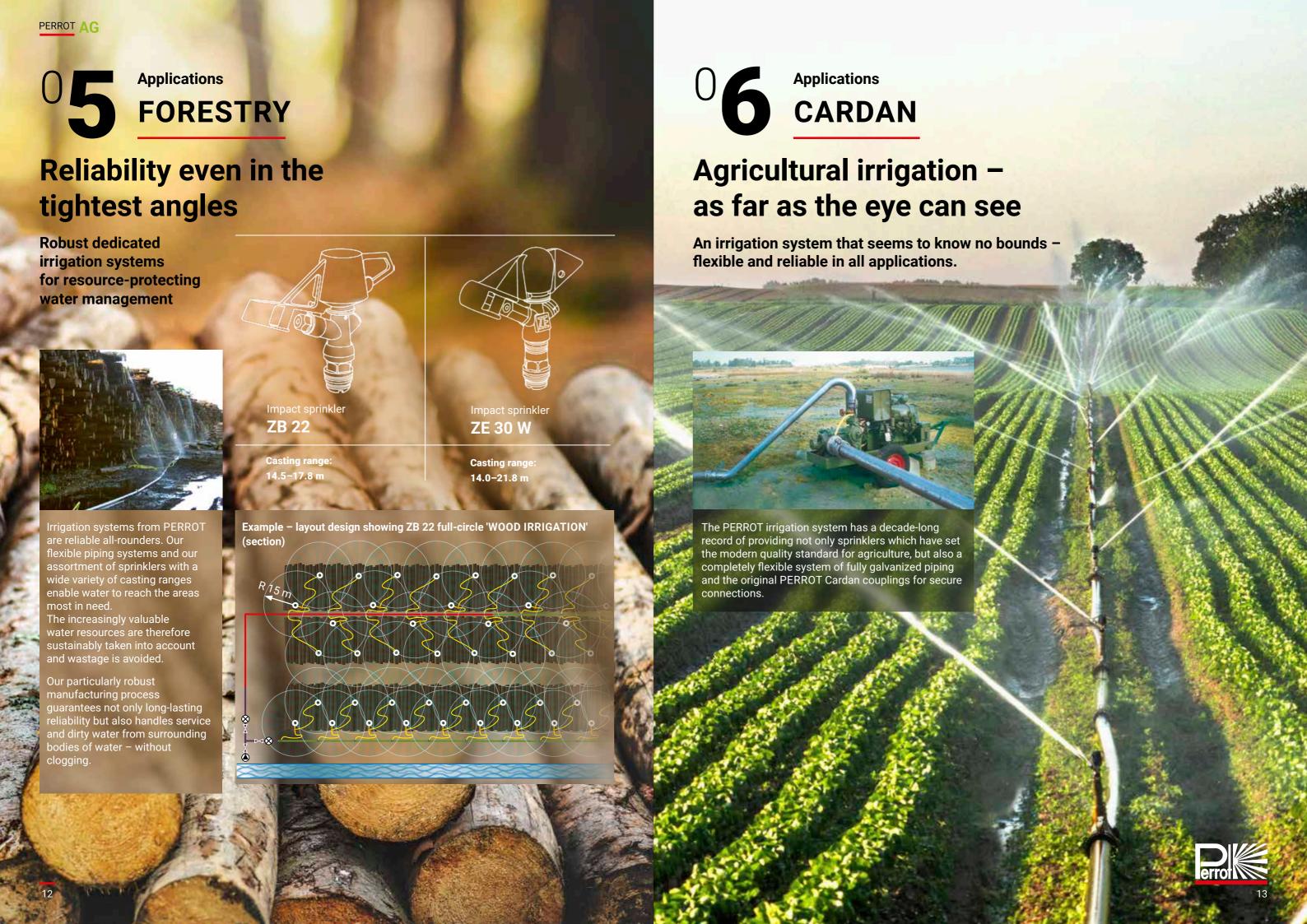
Casting range 13.0-16.3 m

Example layout design showing ZS 30 full-circle 'FROST PROTECTION' sprinklers (section)









And as always - no leakage!





COUPLING WITH SLURRY FLANGE - SHORT AND LONG

Materials: Galvanized steel for attachment to slurry containers. Max. operating pressure of the coupling: 10 bar

DETAILS ON THE ARTICLE GROUP:

Dimensions from 108 x 100 mm to 216 x 200 mm (short/long)

Weight: 3.87 and 7.70 kg

# **KVF SLURRY**

**COUPLING WITH SLURRY FLANGE - SHORT AND LONG** 

Materials: Galvanized steel for attachment to slurry containers. Max. operating pressure of the coupling: 10 bar

DETAILS ON THE ARTICLE GROUP:

Dimensions from 108 x 100 mm to 216 x 200 mm (short/long)

Weight: 5.87 and 15.53 kg











### **KMS**

AREAS OF APPLICATION:

Agriculture, gardening, tunnel and road construction, building work, sewage treatment plants, feces transportation and environmental protection

SPECIFICATIONS:

Coupling dimensions: 50-216 mm

Operating pressure: 50-159 mm max. 10 bar

216 mm max. 8 bar

Transportation media: water, waste water, slurry

# **KVS**

AREAS OF APPLICATION:

Agriculture, gardening, tunnel and road construction, building work, sewage treatment plants, feces transportation and environmental protection

SPECIFICATIONS:

50-216 mm Coupling dimension:

Operating pressure: 50-159 mm max.10 bar

216 mm max. 8 bar

Transportation media: water, waste water, slurry

Illustrations not to scale with each other













# **ZX 30**

# Areas of application: Orchards, horticulture, agriculture, parks and private gardens

Materials: Brass, stainless steel, high-quality synthetic materials

- Nozzle with spray deflector to vary the spray and casting range
- · Spatter-free rocker arm
- · Finest droplet dispersal
- Part-circle sprinkler with switchable toggle spring for optional use as a full-circle or part-circle sprinkler
- Spring protection cap

# **ZA** 7

# Areas of application: Under-tree irrigation, horticulture, agriculture

Materials: Brass, stainless steel, high-quality synthetic materials

- Spray deflectors to vary the spray and casting range
- Part-circle sprinkler with switchable toggle spring for optional use as a full-circle or part-circle sprinkler
- Even and precise water distribution on unprotected sites through flat spray trajectory
- Spring protection cap

# **ZA 22**

# Areas of application: Agriculture, orchards, horticulture

Materials: Brass, stainless steel, high-quality synthetic materials

- Low-spatter rocker arm
- Spray deflector to vary the spray and casting range
- Sprinkler with available tripod
- Part-circle sprinkler with switchable toggle spring for optional use as a full-circle or part-circle sprinkler
- Spring protection cap

# **ZS 30**

# Areas of application: Orchards, horticulture, agriculture, frost protection

Materials: Brass, stainless steel, high-quality synthetic materials

- Spring protection cap
- Use up to -10°C

# **ZB 22**

# Areas of application: Orchards, horticulture, agriculture

Materials: Brass, stainless steel, high-quality synthetic materials

- Part-circle sprinkler with switchable toggle spring for optional use as a full-circle or part-circle sprinkler
- Sand protection ring and spring protection cap
- Part-circle sprinkler with spray deflector screw to vary the casting range and spray

# **ZE 30**

# Areas of application: Orchards, horticulture, agriculture

Materials: Brass, stainless steel, high-quality synthetic materials, cast aluminum, galvanized steel

- Spray deflector to vary the spray and casting range
- Part-circle sprinkler with detachable toggle spring for optional use as a full-circle or part-circle sprinkler
- Spring protection cap
- · Sprinkler with available tripod

### SPECIFICATIONS:

Casting range:7.7-11.1 mWater consumption:0.39-0.92 m³/hOperating pressure:2.0-4.5 barNozzle sizes:2.8-3.5 mmTrajectory:30°Connection:0.D. ¹/2"

### SPECIFICATIONS:

Casting range: 8.0–11.2 m

Water consumption: 0.69–1.96 m³/h
Operating pressure: 2.5–4.5 bar

Nozzle sizes: 3.5–4.5 mm
Second nozzle: 2.4 mm

Trajectory: 7°
Connection: 0.D. ¹/2"

### SPECIFICATIONS:

Casting range:10.5-14.0 mWater consumption:0.69-1.89 m³/hOperating pressure:2.5-4.5 barNozzle sizes:3.5-4.5 mmSecond nozzle:2.2 mmTrajectory:22°Connection:0.D. ¹/2"

### SPECIFICATIONS:

Casting range:13.0-16.3 mWater consumption:0.69-2.04 m³/hOperating pressure:2.5-4.5 barNozzle sizes:3.5-5.2 mmTrajectory:30°Connection:0.D. ³/₄"

### SPECIFICATIONS:

Casting range: 14.5–17.8 m

Water consumption: 0.99–3.82 m³/h

Operating pressure: 2.5–4.5 bar

Nozzle sizes: 4.2–7.0 mm

Second nozzle: 2.4 mm

Trajectory: 22°

Connection: 0.D. ³/₄"

### SPECIFICATIONS:

Casting range:14.0-21.8 mWater consumption:1.25-4.61 m³/hOperating pressure:3.0-7.0 barNozzle sizes:4.5-7.0 mmTrajectory:30°Connection:O.D. 1"



16

# **Product overview**









# **ZK 30**

### Areas of application: Orchards, horticulture, agriculture, frost protection

Materials: Brass, stainless steel, high-quality synthetic materials

- Part-circle sprinkler with detachable toggle spring for optional use as a full-circle or part-circle sprinkler
- Spring protection cap

# **ZM 22**

### Areas of application: Orchards, horticulture, agriculture, tree crown top spraying

Materials: Brass, stainless steel, high-quality synthetic materials, cast aluminum

- Part-circle sprinkler with detachable toggle spring for optional use as a full-circle or part-circle sprinkler
- · Spring protection cap
- · Extremely low-weight large-area sprinkler (970 g)

# **ZN 23**

### Areas of application: Agriculture, forestry

Materials: Brass, stainless steel, highquality synthetic materials, cast aluminum

- Impact sprinkler with slow forward and backward travel
- Switchable toggle spring for optional use as a full-circle or part-circle sprinkler
- Spring protection cap
- · Unaffected by strong wind
- Available types:

Twin-nozzle full-circle sprinkler (D) Single-nozzle part-circle sprinkler (W)

### SPECIFICATIONS:

Connection:

**Casting range:** 19.8-27.5 m Water consumption: 3.94-11.39 m<sup>3</sup>/h Operating pressure: 3.0-7.0 bar Nozzle sizes: 8.0-11.0 mm 30° Trajectory:

O.D. 1"

### SPECIFICATIONS:

**Casting range:** 23.2-34.5 m Water consumption: 6.16-24.10 m<sup>3</sup>/h Operating pressure: 3.0-7.0 bar 10.0-16.0 mm Nozzle sizes: 22° Trajectory: O.D. 1 <sup>1</sup>/<sub>2</sub>" Connection:

### SPECIFICATIONS:

Casting range: 30.5-50.5 m Water consumption: 12.08-60.22 m<sup>3</sup>/h Operating pressure: 3.0-7.0 bar Nozzle sizes: 14.0-24.0 mm Number of nozzles: 2 Trajectory: 23° Connection: I.D. 2 <sup>1</sup>/<sub>2</sub>"



# **QUICK COUPLING PIPES AND COUPLINGS**

Areas of application: Agriculture, gardening, industry, tunnel and road construction, sewage treatment plants, feces transportation

### KSKR steel piping

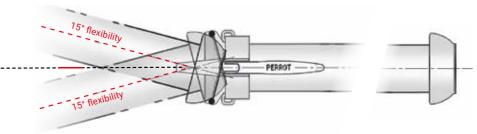
Quick-coupling pipes in standard lengths of 6 m, galvanized, completely with KKMM, KKV and KKG sealing ring, short lengths in 1, 2, 3, 4 and 5 m.

Also available as manifolds with hose barb or threaded male connectors.

Operating pressure: Size 50-159 = 10 bar, size 216 = 8 bar

### KSKR quick-couplings

Easy coupling with just one hand Can be angled on both sides by 15° Pressure-resistant, suction-tight, even when couplings are soiled



### SPECIFICATIONS / ARTICLE NAME:

of Edit Ida Hollo / Although Hame.							
Pipe diameter:	216 mm	159 mm	133 mm	108 mm	89 mm	70 mm	50 mm
Pipe length: 6 m	KSKR 216 / 6 M	KSKR 159 / 6 M	KSKR 133 / 6 M	KSKR 108 / 6 M	KSKR 89 / 6 M	KSKR 70 / 6 M	KSKR 50 / 6 M
Pipe length: 5 m	KSKR 216 / 5 M	KSKR 159 / 5 M	KSKR 133 / 5 M	KSKR 108 / 5 M	KSKR 89 / 5 M	KSKR 70 / 5 M	KSKR 50 / 5 M
Pipe length: 4 m	KSKR 216 / 4 M	KSKR 159 / 4 M	KSKR 133 / 4 M	KSKR 108 / 4 M	KSKR 89 / 4 M	KSKR 70 / 4 M	KSKR 50 / 4 M
Pipe length: 3 m	KSKR 216 / 3 M	KSKR 159 / 3 M	KSKR 133 / 3 M	KSKR 108 / 3 M	KSKR 89 / 3 M	KSKR 70 / 3 M	KSKR 50 / 3 M
Pipe length: 2 m	KSKR 216 / 2 M	KSKR 159 / 2 M	KSKR 133 / 2 M	KSKR 108 / 2 M	KSKR 89 / 2 M	KSKR 70 / 2 M	KSKR 50 / 2 M
Pipe length: 1 m	KSKR 216 / 1 M	KSKR 159 / 1 M	KSKR 133 / 1 M	KSKR 108 / 1 M	KSKR 89 / 1 M	KSKR 70 / 1 M	KSKR 50 / 1 M



# Product overview CARDAN CONNECTIONS You'll always be connected











### KMS-K

# COUPLING WITH ROTATED HOSE NOZZLE

Materials: Galvanized steel, stainless steel Use: Attachment of thin-wall hoses Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions from 50 x 70 mm to 216 x 200 mm; weight 1.02 to 22.30 kg

# KMS-SI

# COUPLING WITH RIBBED HOSE NOZZLE

Materials: Galvanized steel, stainless steel Use: Attachment of thick-wall hoses. Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions from 50 x 52 mm to 216 x 202 mm; weight 0.80 to 17.51 kg

### **KMR**

# COUPLING WITH PIPE SOCKET FOR WELDING ON

Materials: Galvanized steel, stainless steel Use: Fabrication of custom components Operating pressure: size 50–159 mm max. 10 bar. size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Diameters from 50 to 216 mm; weight 1.01 to 18.00 kg



### COUPLING WITH SLURRY FLANGE - SHORT AND LONG

Materials: Galvanized steel, stainless steel Use: Attachment to slurry containers. Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: 2 x 4 dimensions from 108 x 100 mm to 216 x 200 mm (short/long); weight: 5.87 to 15.53 kg

### **KMG**

# COUPLING WITH EXTERNAL AND INTERNAL THREADED\* CONNECTOR

Materials: Galvanized steel, stainless steel
Use: Threaded connection to other components
Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: 10 dimensions/threads from 50 mm x 11/2" to 216 mm x 8"; weight: 1.15 to 20.12 kg

### **KMF**

### COUPLING WITH DIN 2576 FLANGE

Materials: Galvanized steel, stainless steel Use: Attachment to slurry containers. Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: 7 dimensions from 50 x 50 mm to 216 x 200 mm; weight: 3.26 to 26.10 kg



# **KVS-K**

# COUPLING WITH ROTATED HOSE NOZZLE

Materials: Galvanized steel, stainless steel Use: Attachment of thin-wall hoses Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions from 50 x 70 mm to 216 x 200 mm; weight 0.48 to 11.45 kg



# **KVS-SI**

# COUPLING WITH RIBBED HOSE NOZZLE

Materials: Galvanized steel, stainless steel Use: Attachment of thick-wall hoses. Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions from 50 x 52 mm to 216 x 202 mm; weight 0.23 to 8.20 kg



### **KVR**

# COUPLING WITH PIPE SOCKET FOR WELDING ON

Materials: Galvanized steel, stainless steel Use: Fabrication of custom components Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Diameters from 50 to 216 mm; weight 0.33 to 6.40 kg



# **KVF SLURRY**

### COUPLING WITH SLURRY FLANGE – SHORT AND LONG

Materials: Galvanized steel, stainless steel Use: Attachment to slurry containers. Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions from 108 x 100 mm to 216 x 200 mm (short/long); weight: 3.87 to 7.70 kg



### **KVG**

# COUPLING WITH EXTERNAL AND INTERNAL THREADED\* CONNECTOR

Materials: Galvanized steel, stainless steel
Use: connection with counterparts by means of a threaded connector
Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions/threads from 50 mm x  $1^1/_2$ " to 216 mm x 8 "; weight: 0.39 to 9.30 kg



# KVF

### COUPLING WITH DIN 2576 FLANGE

Materials: Galvanized steel, stainless steel Use: Attachment to slurry containers. Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions from 50 x 50 mm to 216 x 200 mm; weight: 3.08 and 15.07 kg

Illustrations not to scale with each other

20

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# PERROT AG Product overview CARDAN CONNECTIONS Our products may bend, but do not break













### **KGMKV**

### **EXTENSION PIECE, LARGE** FEMALE CONNECTOR / SMALL MALE CONNECTOR

Materials: Galvanized steel, stainless steel Use: providing bridging between differences in pipe diameters IMPORTANT: be aware of coupling size changes Operating pressure: size 50-159 mm

max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions/lengths from 50 x 70 mm to 159 x 216 mm; weight 1.96 to 20.17 kg

### **KKMGV**

### **REDUCING PIECE, SMALL** FEMALE CONNECTOR / LARGE MALE CONNECTOR

Materials: Galvanized steel, stainless steel Use: providing bridging between differences in pipe diameters IMPORTANT: be aware of coupling size changes Operating pressure: size 50-159 mm

max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Dimensions/lengths from 50 x 70 mm to 159 x 216 mm; weight 1.96 to 20.17 kg

### **KRKB**

### CARDAN PIPE BENDS OF 90°, 60°, 45°AND 30°

Materials: Galvanized steel, stainless steel Use: compact pipe direction change despite 15° angling options for each coupling Operating pressure: size 50-159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: 4 angle options with diameters from 50 to 216 mm; weight 1.61 to 36.17 kg

### **KDMT**

### REVERSING COUPLER, FEMALE/FEMALE. **GALVANIZED**

Materials: Galvanized steel, stainless steel Use: connection of identical coupling

Operating pressure: size 50-159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: 1.84 to 32.20 kg

### **KDVT**

### REVERSING COUPLER, MALE/MALE, GALVANIZED

Materials: Galvanized steel, stainless steel Use: connection of identical coupling

Operating pressure: size 50-159 mm max. 10 bar, size 216 mm max. 8 bar

### **SLK**

### **CLAMP SADDLE**

Materials: Galvanized steel Use: individual positioning of drill holes in pipes for attachment of accessories (sprinklers)

Diameters from 50 to 216 mm; weight

DETAILS ON THE ARTICLE GROUP: Diameters from 50 to 216 mm; weight 0.52 to 13.00 kg

DETAILS ON THE ARTICLE GROUP: Diameters 50 to 89 mm with double connection thread (1/2" internal size / 1"

external size). Weight: 0.28 to 0.50 kg



# **KRS**

### SUPPORT WITH AND WITHOUT CONNECTION THREAD

Materials: Galvanized steel ( $^{1}/_{2}$ " female and 1" male) Use: optimum irrigation of major plant populations and avoidance of soiling where couplings are in contact with the ground

DETAILS ON THE ARTICLE GROUP:

Diameters 50, 70 and 89 mm in designs with/without double connection threads (1/2) female / 1" male); weight 1.04 to 1.65 kg

### **KKG**

### **SEALING RING FOR M PART**

Materials: SBR, NBR 'medium', NBR 'high' and EPDM Use: The material selected depends on the intended use: e.g. cold water, lubricating oil, fuel, diesel, heating oil, hot water

DETAILS ON THE ARTICLE GROUP:

For pipe diameters 50 mm to 216 mm with sealing ring external diameters from 86 x 11 mm to 304 x 24.6 mm, suitable for various fluids and temperature ranges

Illustrations not to scale with each other



# PERROT AG

# Product overview

# CARDAN CONNECTIONS

# Every requirement gets the right solution



# **KMX**

### **END CAP**

**KVX** 

**END PLUG** 

0.14 to 6.15 kg

Materials: Galvanized steel, stainless steel Use: Closing off pipe ends. Operating pressure: size 50-159 mm max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP: Diameters from 50 to 216 mm; weight: 0.73 to 15.91 kg



# **KT**

### T PIECE BRANCH 90°, 45° AND 30° - ALSO AVAILABLE IN **OTHER ANGLES\***

Materials: Galvanized steel. Materials: Galvanized steel. stainless steel stainless steel Use: Closing off pipe ends. Operating pressure: size 50-159 mm Operating pressure: size 50–159 mm max. 10 bar, size 216 mm max. 8 bar max. 10 bar, size 216 mm max. 8 bar

DETAILS ON THE ARTICLE GROUP:

Use: e.g. right-angled fluid feed or discharge

\*Individual angle settings on request

Diameters/lengths from 50 x 50 mm to 216 x 216 mm; weight: 2.70 to 41.51 kg





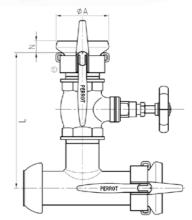
# **KSK**

### **CARDAN STRAINER**

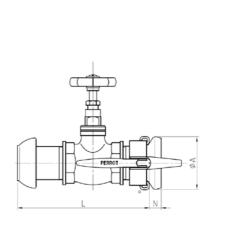
Materials: Galvanized steel Use: removal by suction of various fluids. Installed, manual shut-off flap Operating pressure: size 50-159 mm max. 10 bar

DETAILS ON THE ARTICLE GROUP: Diameters from 70 to 159 mm, weights 3.75 to 26.50 kg

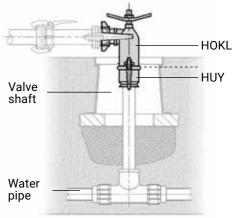












# **KTxP**

### T PIECE WITH SHUT OFF

Materials: Galvanized steel Use: stepless regulation or complete shut off of material flows Operating pressure: size 50-159 mm max. 10 bar

DETAILS ON THE ARTICLE GROUP: Diameters from 70 mm to 108 mm; weight: 5.90 to 9.05 kg

# **KZA**

### **CARDAN IN-LINE VALVE**

Materials: Galvanized steel Use: stepless regulation or complete shut off of material flows Operating pressure: size 50-159 mm max. 10 bar

DETAILS ON THE ARTICLE GROUP: Diameters/connections from 50 mm  $x \frac{1}{2}$ " to 159 mm x 6"; weight: 2.10 to 26.50 kg

Materials: Galvanized steel Use: extraction of water from underground pipes when required

**HOKL & HUY** 

**HYDRANT UPPER SECTION &** 

**HYDRANT LOWER SECTION 3"** 

DETAILS ON THE ARTICLE GROUP: Different diameters. Weight: 4.00 to 6.50 kg Lower section available in 3" Weight: 1.86 kg

Illustrations not to scale with each other

DETAILS ON THE ARTICLE GROUP:

Diameters from 50 to 216 mm; weight:





