

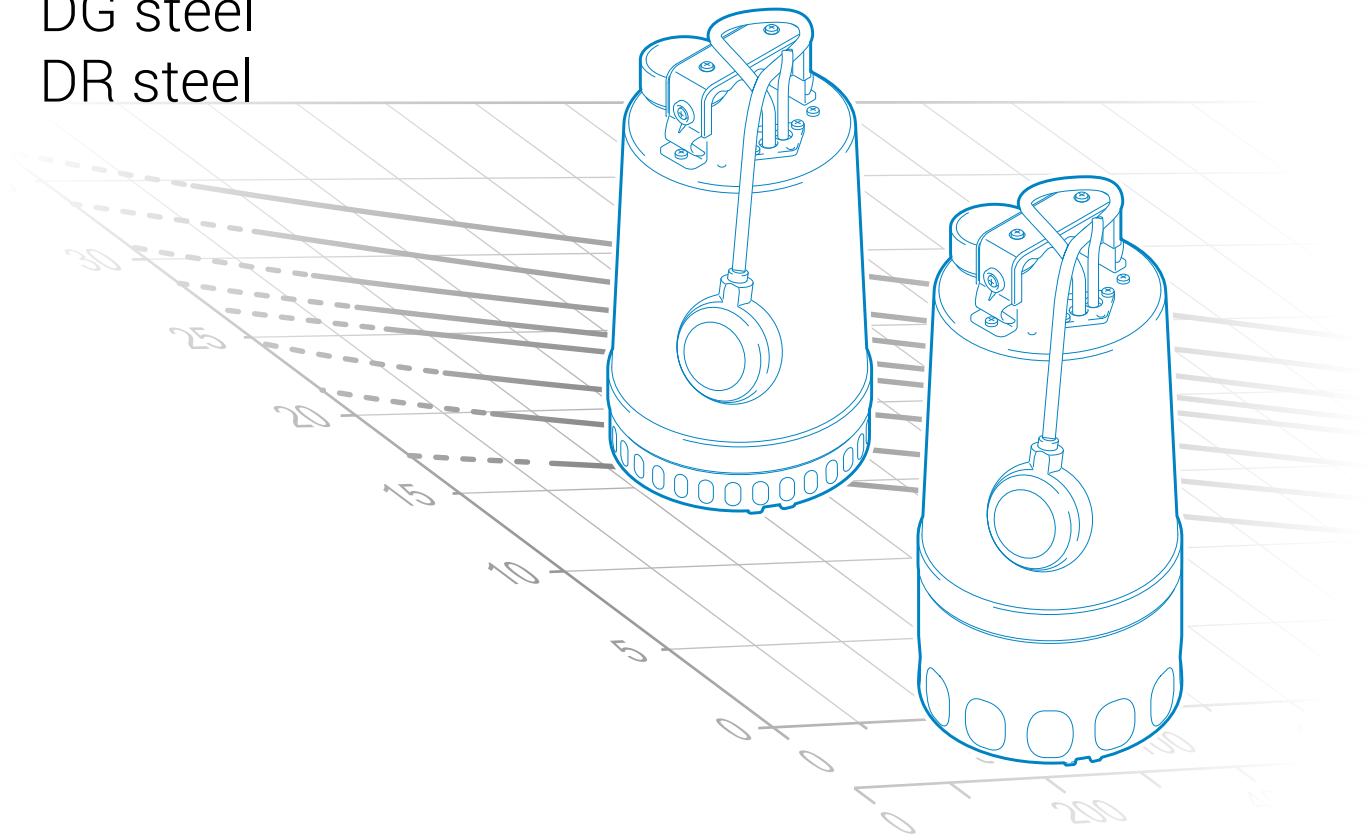


better together

50Hz

Steel series

DG steel
DR steel



D A T A B O O K L E T

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EN



better together

steel Series

DG steel

DR steel



D A T A B O O K L E T

steel Series

General characteristics



- Lifting handle: Chrome-nickel steel AISI 304.
- Cooling System: As for the internal recycle pumped liquid system, the motor cooling is guaranteed even if the pump is partially covered by the liquid.
- One silicon carbide mechanical seal (SiC) and one alumina graphite mechanical seal (AL), V-ring
- Impeller: Chrome-nickel steel AISI 304.
- Optional: Vertically sliding level regulator, recommended for installation in small wells.
- DG steel: Chrome-nickel steel AISI 304 Strainer. Max free passage 40 mm.
- DR steel: A special set allows the sewage pump to be transformed into a dry floor one. The minimum level of liquid can be lowered to 5 mm from the ground by setting two special shimming.

Hydraulic families



DG (Draga)

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- Set-back vortex impeller
- For clean or slightly dirty water, containing solids up to 40 mm grain size. For sewerage plants, livestock farms, car washes, hydro-sanitary applications.



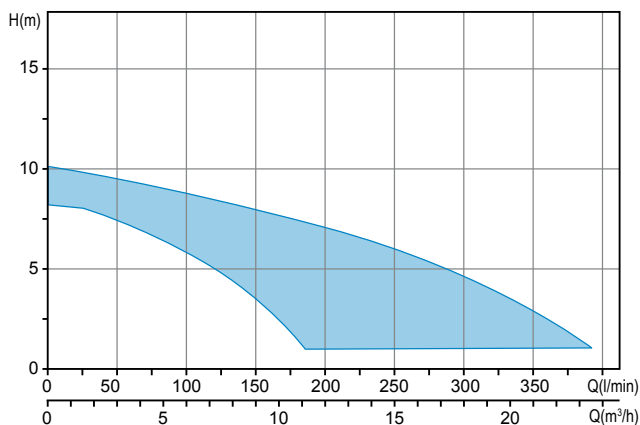
DR (Dreno)

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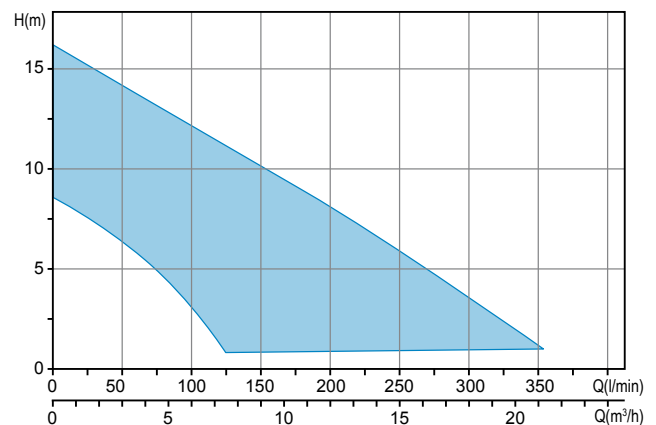
- Multi-channel open impeller
- For clean water containing solids up to 12 mm. For draining rooms or emptying tanks. For water from ponds, streams or pits and for rainwater collection.

Operating ranges

DG steel



DR steel



Key to product code

DG steel 37 M5

① ② ③ ④ ⑤

- ① Family
- ② Series
- ③ Power (HPx100)
- ④ Motor phases
 - M = Single-phase
 - T = Three-phase
- ⑤ Power supply voltage frequency
 - 5 = 50Hz
 - 6 = 60Hz

Versions available

• Electrical variants

Single-phase models

- TCG** Thermal protection, capacitor, electrical cabinet, overload protection
- TCW** Thermal protection, capacitor, capacitor, vertical travel float switch

Three-phase models

- NAE** No electric accessories installed
- TRG** Thermal protection, relais, float switch

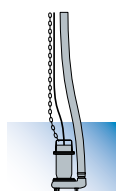
• Cooling system

- N** No cooling and/or seal flushing system

• Set of mechanical seals

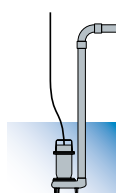
- SICAL** One silicon carbide mechanical seal (SiC) and one alumina graphite mechanical seal (AL), V-ring

Installations



Free installation

The electric pump, standing on its feet or base, is connected to the delivery flexible pipe using a joint fixed to the discharge. This installation allows to move easily the electrical pump



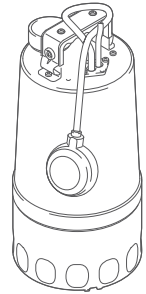
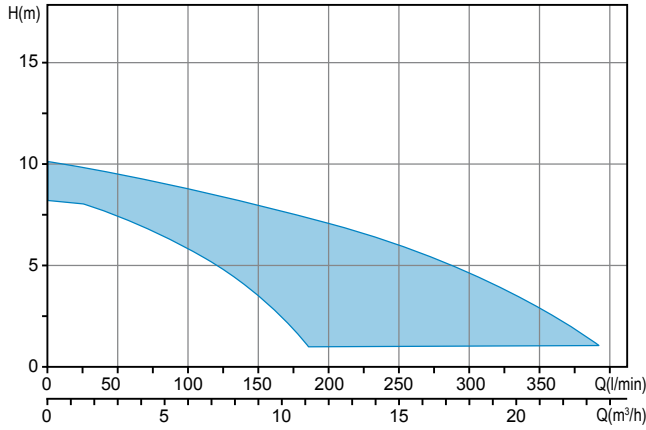
Fixed installation

The electric pump, standing on its feet or base, is connected to the delivery pipe, which is screwed to the discharge if threaded, or fixed to a bend if the port is flanged. The pump-hose connection may be threaded or flanged, depending on the pump fitting.

DG steel

Pumps with vortex impeller

Operating ranges



Range characteristics

Motor power	0.37 ÷ 0.75 kW
Poles	2
Insulation class	F
Degree of protection	IP68
Discharge	GAS 1/4" - 1 1/2" vertical
Free passage	max 40 mm
Max flow rate	6.5 l/s (392 l/min)
Max head	10.0 m

Motor

Dry motor with thermal protections.

Cable

H07RN-F - 5 m cable length. Optional 10 m cable length.

Mechanical seals

One silicon carbide mechanical seal (SiC) and one alumina graphite mechanical seal (AL), V-ring

Applications

For clean or slightly dirty water, containing solids up to 40 mm grain size. For sewerage plants, livestock farms, car washes, hydro-sanitary applications.

Versions

Electrical variants	TCG, TCW (single-phase models) NAE, TRG (three-phase models)
Cooling system	N
Mechanical seals	SICAL

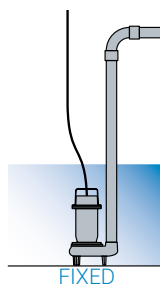
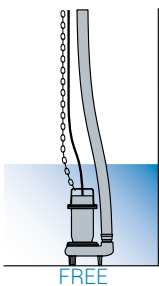
Operating specifications

Max operating temperature	40°C (90°C max 3')
PH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm²/s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm³
Acoustic pressure max	<70dB
Max starts per hour	30

Construction materials

Case	Chrome-nickel steel AISI 304
Hydraulic parts	Chrome-nickel steel AISI 304
Impeller	Chrome-nickel steel AISI 304
Nuts and bolts	Stainless steel - Class A2-70
Standard gasket	Rubber - NBR
Shaft	Stainless steel - AISI 420
Paint type	-

Installations

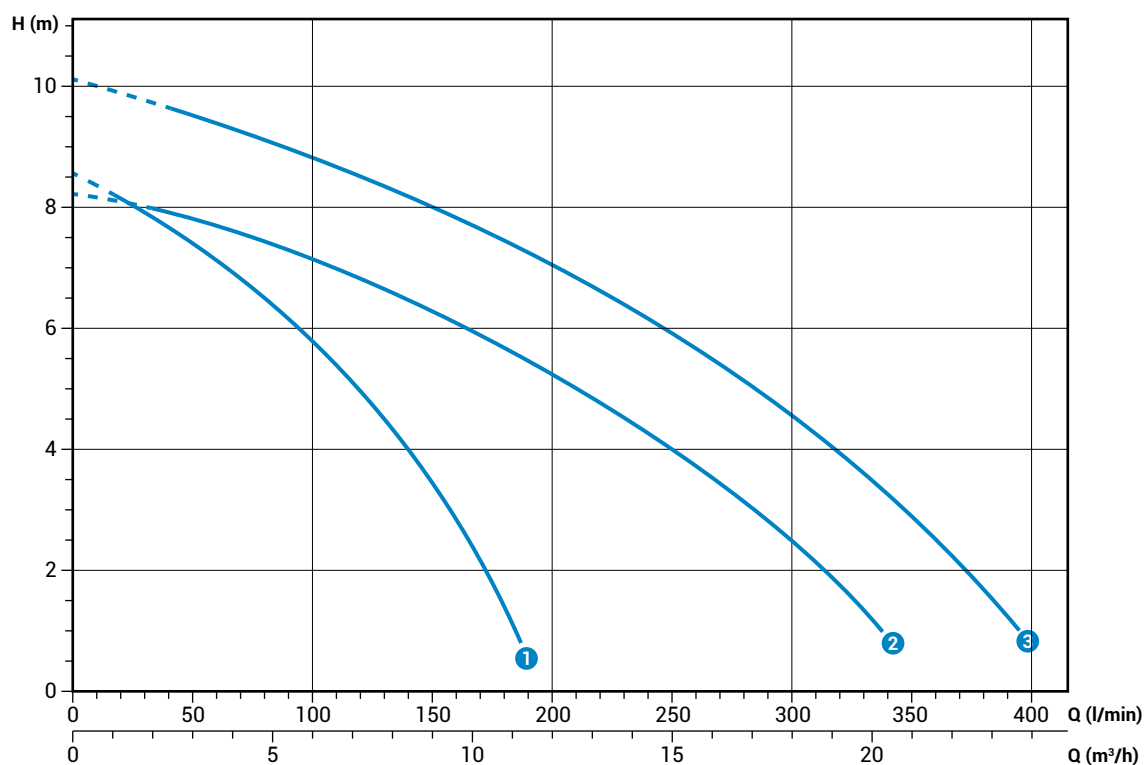


DG steel 2/G1¼" - G1½"

Performances

	l/s	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
	l/min	0	30	60	90	120	150	180	210	240	270	300	330	360
	m³/h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.7	14.5	16.3	18.1	19.9	21.7
① DG-Steel 37 M5		8.7	7.6	7.1	6.1	5.0	3.4	1.3						
② DG-Steel 55 M5		8.1	7.8	7.5	7.0	6.6	6.2	5.7	4.8	4.1	3.2	2.3	1.3	
③ DG-Steel 75 M(T)5		10.0	9.5	9.2	8.6	8.2	7.8	7.5	6.7	6.0	5.2	4.1	3.2	2.1

Characteristic curves according to UNI EN ISO 9906



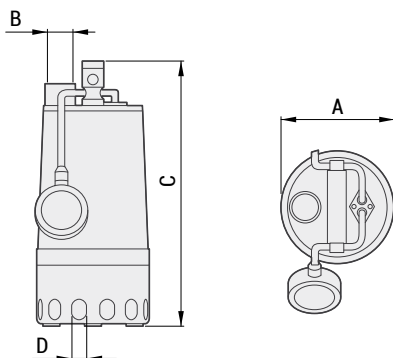
Technical data


	V	Phases	P1 (kw)	P2 (kw)	A	Rpm	Start	Cable	Ø	Free passage
① DG-Steel 37 M5	230	1	-	0.37	3.0	2900	Dir	3G1	G 1¼"	25 mm
② DG-Steel 55 M5	230	1	-	0.55	4.3	2900	Dir	3G1	G 1½"	40 mm
③ DG-Steel 75 M5	230	1	-	0.75	5.6	2900	Dir	3G1	G 1½"	40 mm

	V	Phases	P1 (kw)	P2 (kw)	A	Rpm	Start	Cable	Ø	Free passage
③ DG-Steel 75 T5	400	3	-	0.75	2.4	2900	Dir	4G1	G 1½"	40 mm

DG steel

Overall dimensions and weights



	Ø A	B	C	D	
DG-Steel 37 M5	168.5	G 1¼"	350	25	6.6
DG-Steel 55 M5	216	G 1½"	406	40	8.1
DG-Steel 75 M(T)5	216	G 1½"	406	40	8.9

Dimensions in mm

Packaging dimension



	X	Y	Z
DG-Steel 37 M5	200	200	400
DG-Steel 55 M5	240	250	470
DG-Steel 75 M(T)5	240	250	470

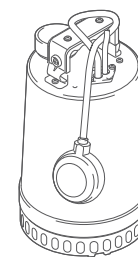
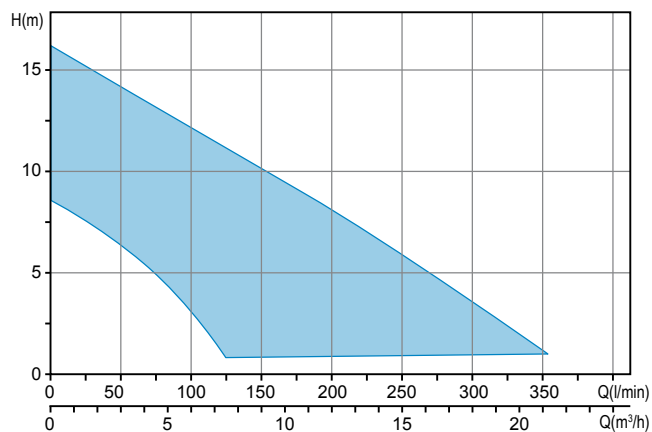
Dimensions in mm

No. pieces per pallet

For DG-Steel 37 models each pallet (EUR 1000x1200 mm) is able to take 90 pieces.
 For DG-Steel 55-75 models each pallet (EUR 1000x1200 mm) is able to take 40 pieces.

Pumps with multi-channel open impeller

Operating ranges



Range characteristics

Motor power	0.25 ÷ 0.75 kW
Poles	2
Insulation class	F
Degree of protection	IP68
Discharge	GAS 1¼ - 1½" vertical
Free passage	max 12 mm
Max flow rate	5.9 l/s (355 l/min)
Max head	16.0 m

Motor

Dry motor with thermal protections.

Cable

H07RN-F - 5 m cable length. Optional 10 m cable length.

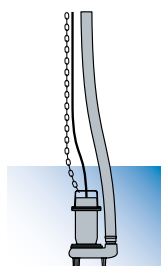
Mechanical seals

One silicon carbide mechanical seal (SiC) and one lip seal (AL).

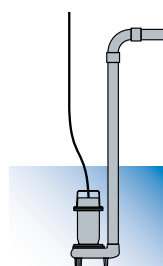
Applications

For clean water containing solids up to 12 mm. For draining rooms or emptying tanks. For water from ponds, streams or pits and for rainwater collection.

Installations



FREE



FIXED

Versions

Electrical variants	TCG, TCW (single-phase models) NAE, TRG (three-phase models)
Cooling system	N
Mechanical seals	SICAL

Operating specifications

Max operating temperature	40 °C (90°C max 3')
PH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm²/s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm³
Acoustic pressure max	<70dB
Max starts per hour	30

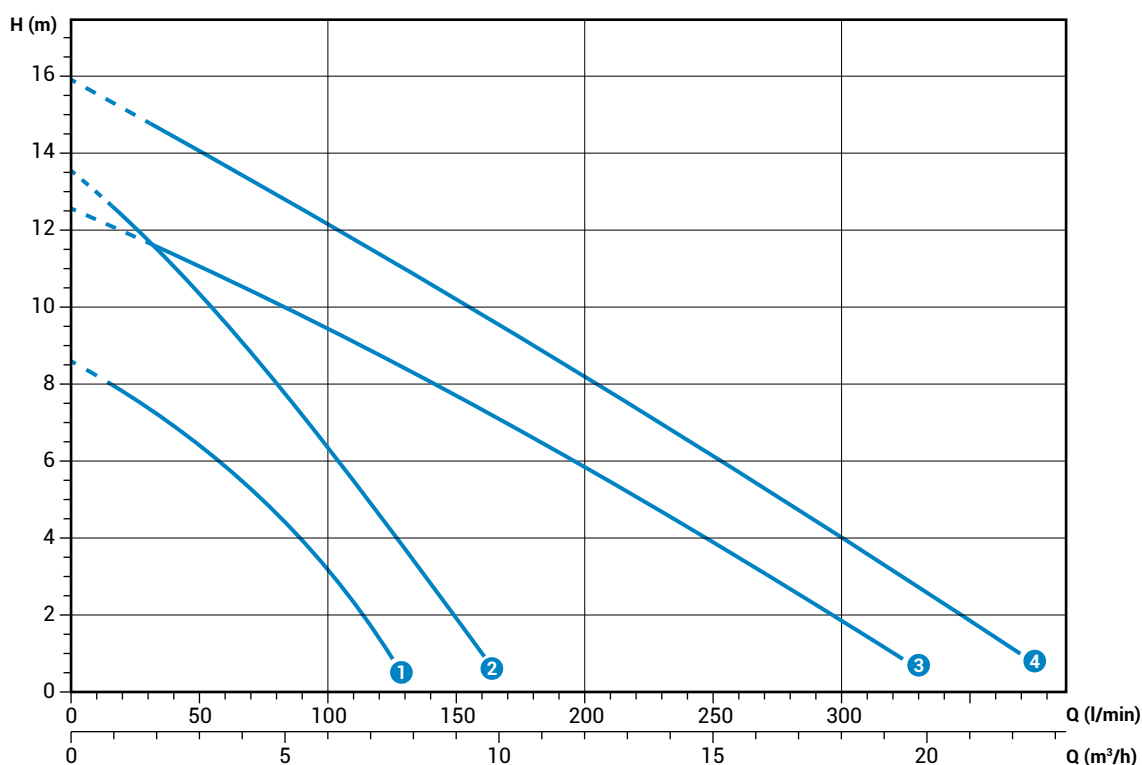
Construction materials

Case	Chrome-nickel steel AISI 304
Hydraulic parts	Chrome-nickel steel AISI 304
Impeller	Chrome-nickel steel AISI 304
Nuts and bolts	Stainless steel - Class A2-70
Standard gasket	Rubber - NBR
Shaft	Stainless steel - AISI 420
Paint type	-

DR steel 2/G1¼" - G1½"

Performances

	l/s	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5
	l/min	0	30	60	90	120	150	180	210	240	270	300	330
	m³/h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.7	14.5	16.3	18.1	19.9
① DR-Steel 25 M5		8.5	7.0	5.7	4.0	1.3							
② DR-Steel 37 M5		13.6	11.6	9.5	7.0	4.5	1.9						
③ DR-Steel 55 M5		12.4	11.3	10.4	9.2	8.4	7.2	6.3	5.0	4.0	3.0	1.8	
④ DR-Steel 75 M(T)5		16.0	15.0	13.4	12.4	11.2	10.0	8.8	7.6	6.5	5.2	3.8	2.5

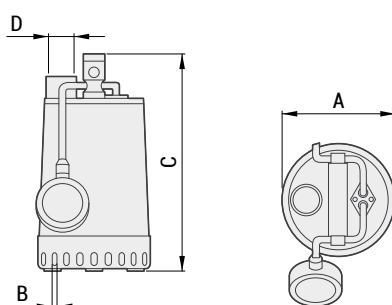



Characteristic curves according to UNI/EN ISO 9906

Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Cable	Ø	Free passage
① DR-Steel 25 M5	230	1	-	0.25	2.3	2900	Dir	3G1	G 1¼"	10 mm
② DR-Steel 37 M5	230	1	-	0.37	3.1	2900	Dir	3G1	G 1½"	10 mm
③ DR-Steel 55 M5	230	1	-	0.55	4.3	2900	Dir	3G1	G 1½"	12 mm
④ DR-Steel 75 M5	230	1	-	0.75	5.6	2900	Dir	3G1	G 1½"	12 mm

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Cable	Ø	Free passage
④ DR-Steel 75 T5	400	3	-	0.75	2.4	2900	Dir	4G1	G 1½"	12 mm

Overall dimensions and weights

	Ø A	B	C	D	 kg
DR-Steel 25 M5	168.5	G 1¼"	299	10	5.9
DR-Steel 37 M5	168.5	G 1¼"	299	10	6.3
DR-Steel 55 M5	216	G 1½"	335	12	7.7
DR-Steel 75 M(T)5	216	G 1½"	335	12	8.4

Dimensions in mm

Packaging dimension

	X	Y	C
DR-Steel 25 M5	200	200	350
DR-Steel 37 M5	200	200	350
DR-Steel 55 M5	240	250	400
DR-Steel 75 M(T)5	240	250	400

Dimensions in mm

No. pieces per pallet

For DR-Steel 25-37 models each pallet (EUR 1000X1200 mm) is able to take 90 pieces.
 For DR-Steel 55-75 models each pallet (EUR 1000X1200 mm) is able to take 60 pieces.

Hydraulic performance data

For quick, easy reference

DG steel

	l/s	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
	l/min	0	30	60	90	120	150	180	210	240	270	300	330	360
	m ³ /h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.7	14.5	16.3	18.1	19.9	21.7
① DG-Steel 37 M5		8.7	7.6	7.1	6.1	5.0	3.4	1.3						
② DG-Steel 55 M5		8.1	7.8	7.5	7.0	6.6	6.2	5.7	4.8	4.1	3.2	2.3	1.3	
③ DG-Steel 75 M(T)5		10.0	9.5	9.2	8.6	8.2	7.8	7.5	6.7	6.0	5.2	4.1	3.2	2.1

DR steel

	l/s	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5
	l/min	0	30	60	90	120	150	180	210	240	270	300	330
	m ³ /h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.7	14.5	16.3	18.1	19.9
① DR-Steel 25 M5		8.5	7.0	5.7	4.0	1.3							
② DR-Steel 37 M5		13.6	11.6	9.5	7.0	4.5	1.9						
③ DR-Steel 55 M5		12.4	11.3	10.4	9.2	8.4	7.2	6.3	5.0	4.0	3.0	1.8	
④ DR-Steel 75 M(T)5		16.0	15.0	13.4	12.4	11.2	10.0	8.8	7.6	6.5	5.2	3.8	2.5



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