



# DUOLINE™

Rotary vane pumps for all applications in the low and medium vacuum range

PFEIFFER VACUUM

## Rotary vane pumps for all applications in the low and medium vacuum range

The two-stage high-performance rotary vane pumps cover all low and medium vacuum applications, achieving pumping speeds of 1.25 to 300 m<sup>3</sup>/h. Applications range from mass spectrometry or optical coating to critical industrial applications such as drying processes, metallurgical processes or resin casting systems.

The pumps ensure high operational safety – preferred as a backing pump in a Roots or turbo pumping station. The integrated, hydraulically controlled high-vacuum safety valve ensures high operational safety. An integrated connection point for oil return simplifies retrofitting of an oil mist filter.

Thanks to the reduced oil mist discharge, the innovative drive concept and the optional magnetic coupling, the rotary vane pumps are clean and environmentally friendly.

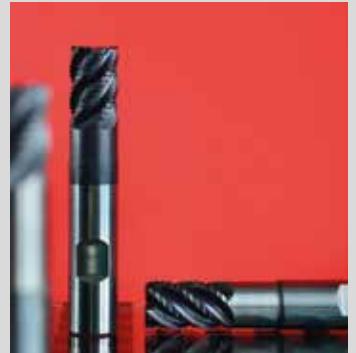
The DuoLine has a long service life and a pumping speed that is independent of the type of gas. Thanks to their compact design and optimized cooling, the pumps are very well suited for system integration.



Flywheel system,  
Industry



Analytics



Coating



## Applications

- All applications in low and medium vacuum
- Ideal backing pump for turbopumps and Roots pumps
- General laboratory use
- Analytics
- Chemical laboratory
- Freeze drying
- Process engineering

## **Rotary vane pumps for all applications in the low and medium vacuum range**

## Standard

Our standard rotary vane pumps are generally filled with mineral oil and cover a broad range of uses in practically all fields of vacuum technology.

## Magnetically coupled

In contrast to the standard pump, these products have a frictionless magnetic coupling. Oil leakage from a wear-prone conventional shaft seal is ruled out in these models.

- No Maintenance at the shaft feedthrough – lower maintenance costs
  - No oil leaks – environment-friendly

### **Corrosive**

These corrosive versions of our rotary vane pumps are prepared for operation with Pfeiffer Vacuum perfluoropolyether (PFPE) operating fluids. Due to the inert operating fluid, these pumps can be used in highly corrosive processes<sup>1)</sup>

<sup>1)</sup> PFPE operating fluids must be ordered separately.

## **Corrosive magnetically coupled**

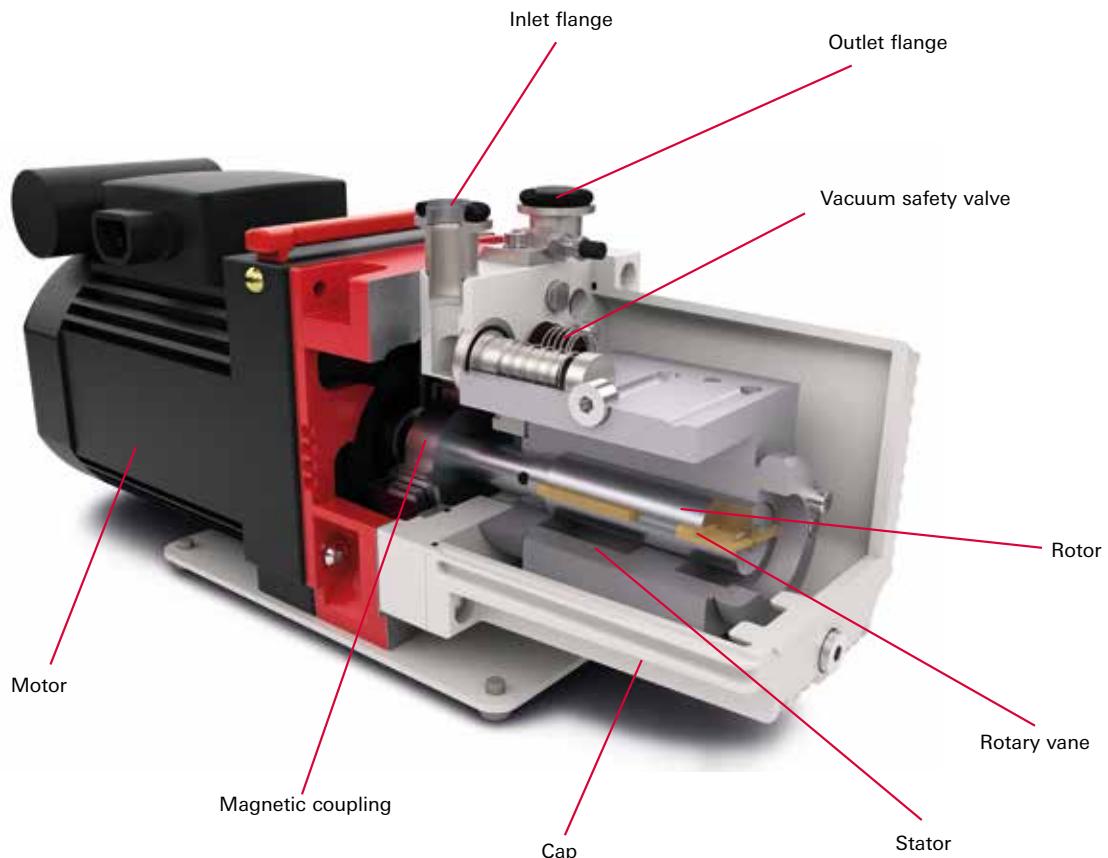
By using the magnetic coupling, the integral leak rate of these pumps is less than  $1 \cdot 10^{-7}$  Pa m<sup>3</sup>/s. This maximizes the operating reliability in corrosive applications.<sup>1)</sup>

## **DC drive**

Due to the state-of-the-art drive, the DC version is even more energy-saving and lighter. With its brushless 24 V DC drive, the pump is perfectly suited for mobile applications, for example, in analytical applications. Furthermore, the temperature range is extended in comparison to common rotary vane pumps. The DC drive operates at -20°C; therefore it can be operated in vehicles.

## **ATEX version**

Especially for processes that take place in explosive environments or for evacuating explosive gases and vapors, Pfeiffer Vacuum has developed the Duo 11 ATEX rotary vane pump. It is certified in accordance with ATEX directive 2014/34/EU and meets the high requirements for explosion protection.



## **Customer benefits**

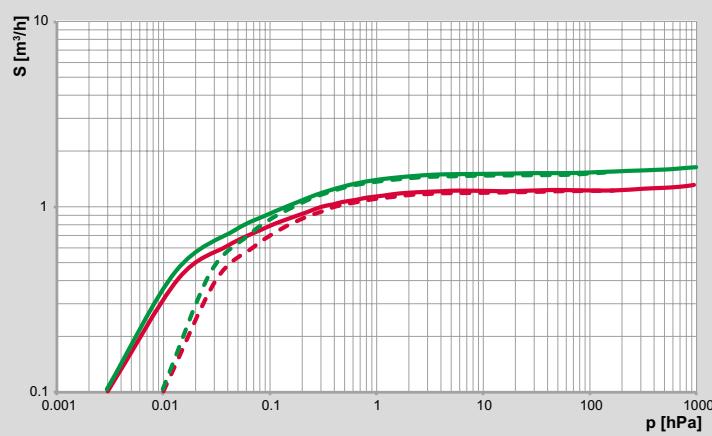
- Wide range of pumps with pumping speed of 1.3 up to 300 m<sup>3</sup>/h
- Space-saving and ideal for systems integration
- High pumping speeds with small dimensions
- High operating reliability through integrated high vacuum safety valve
- Non-ferrous metal version ensures additional operational safety
- Also available as corrosive gas version
- Long life and low maintenance thanks to magnetic coupling

# DUOLINE™ – PUMPING SPEED 1.25–30 M<sup>3</sup>/H

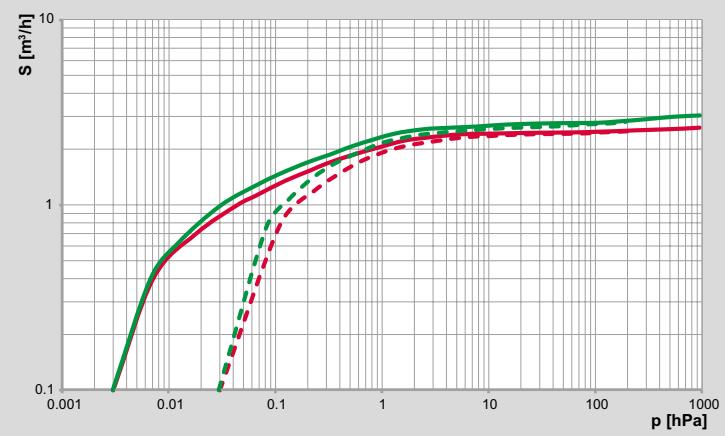
## Pumping speed and dimensions

### Pumping speed

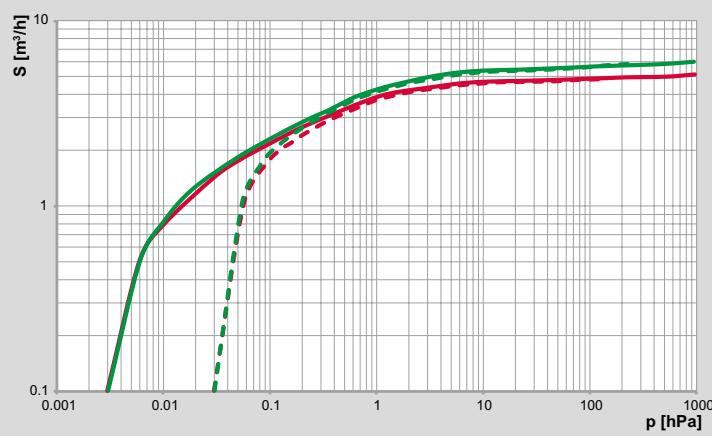
Duo 1.6 / Duo 1.6 M



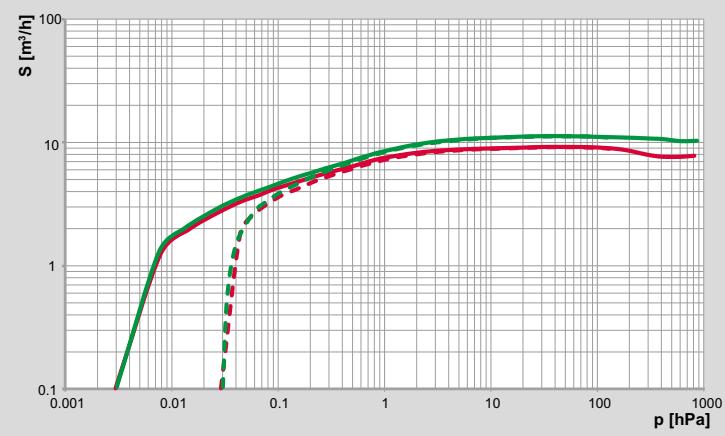
Duo 3 / Duo 3 M / Duo 3 MC



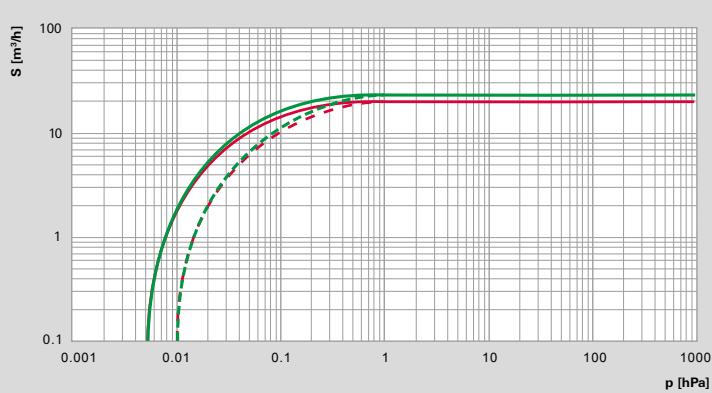
Duo 6 / Duo 6 M / Duo 6 MC



Duo 11 / Duo 11 M / Duo 11 MC



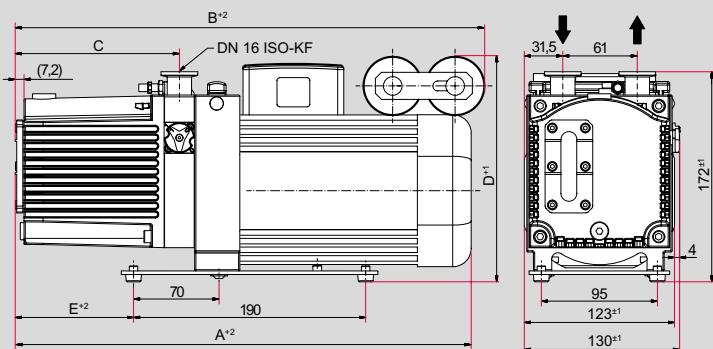
Duo 20 M / Duo 20 MC



— without gas ballast – 50 Hz  
- - - with gas ballast – 50 Hz  
— without gas ballast – 60 Hz  
- - - with gas ballast – 60 Hz

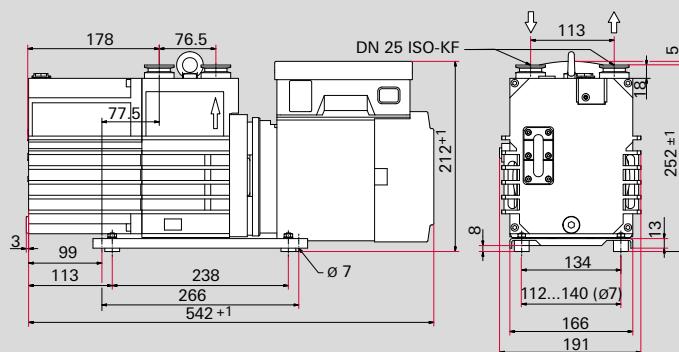
## Dimensions

Duo 1.6, Duo 3, Duo 6, Duo 11



	<b>Duo 1.6</b>	<b>Duo 1.6 M / Duo 1.6 MC</b>	<b>Duo 3</b>	<b>Duo 3 M / Duo 3 MC</b>	<b>Duo 6</b>	<b>Duo 6 M / Duo 6 MC</b>	<b>Duo 11</b>	<b>Duo 11 M / Duo 11 MC</b>
A	315.5	357.5	309	351	381	423	424.5	466.5
B	334.5	376.5	335	377.5	391	433	414.5	456.5
C	123	123	123	123	145	145	185	185
D	192	192.5	187	187.5	182	182.5	216.5	216.5
E	85.5	85.5	85.5	85.5	108.5	108.5	148	148

Duo 20 M / Duo 20 MC



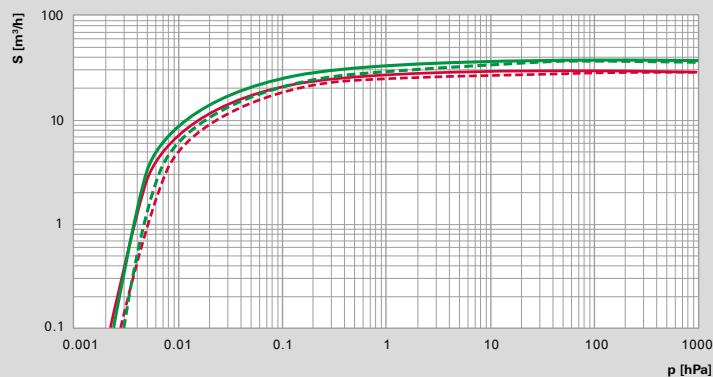
Dimensions in mm

# DUOLINE™ – PUMPING SPEED 32–300 M<sup>3</sup>/H

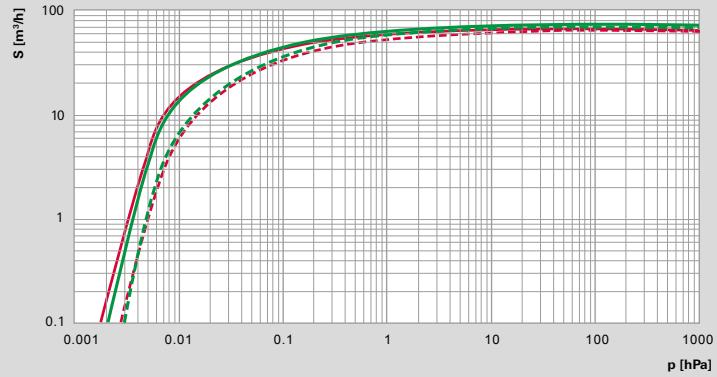
## Pumping speed and dimensions

### Pumping speed

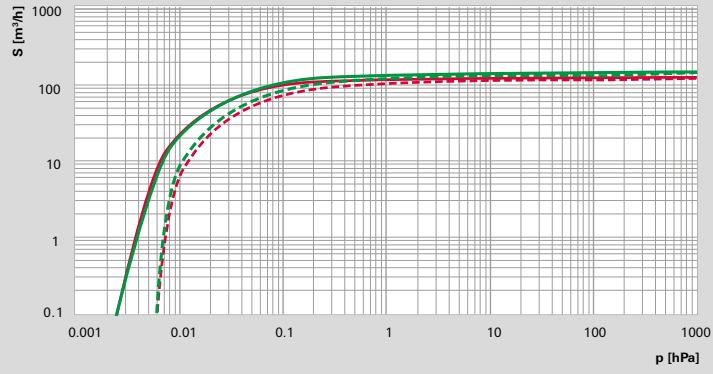
Duo 35 / Duo 35 M / Duo 35 C / Duo 35 MC



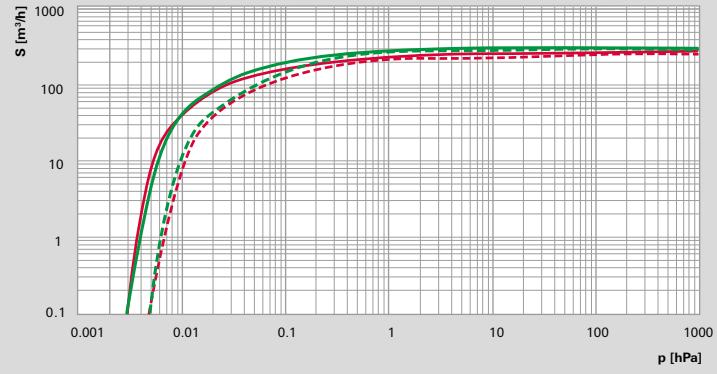
Duo 65 / Duo 65 M / Duo 65 C / Duo 65 MC



Duo 125 / Duo 125 M



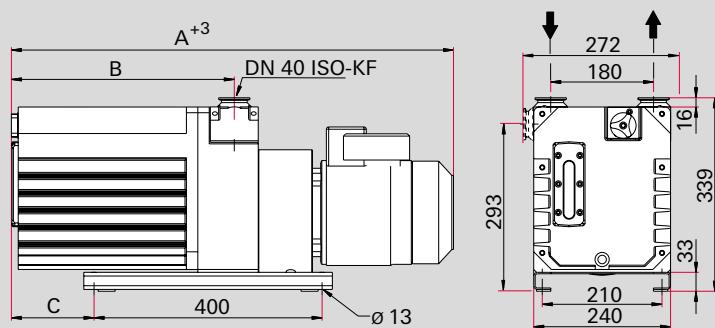
Duo 255 / Duo 255 M



- without gas ballast – 50 Hz
- - - with gas ballast – 50 Hz
- without gas ballast – 60 Hz
- - - with gas ballast – 60 Hz

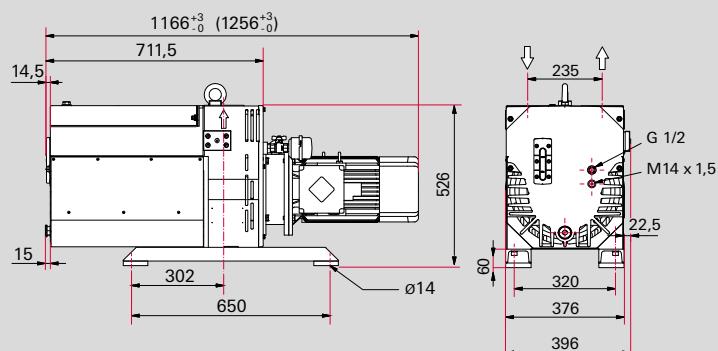
## Dimensions

Duo 35, Duo 65

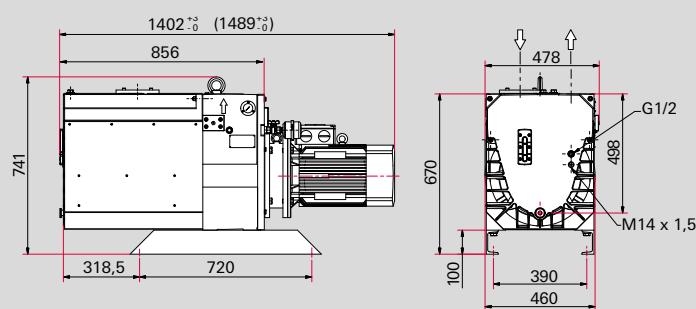


	Duo 35 / Duo 35 C	Duo 35 M	Duo 35 MC	Duo 65 / Duo 65 C	Duo 65 M	Duo 65 MC
A	658	704	739	744	784	819
B	312	312	312	392	392	392
C	66	66	66	146	146	146

Duo 125 / Duo 125 M



Duo 255 / Duo 255 M



(...) = M version

Dimensions in mm

# DUOLINE™ – STANDARD, CORROSIVE

## Technical data and order numbers

### Technical data

	Duo 1.6	Duo 3	Duo 6	Duo 11
Flange (out)	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF
Flange (in)	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF
Exhaust pressure, max.	1500 hPa	1500 hPa	1500 hPa	1500 hPa
Operating fluid filling	0.4 l	0.4 l	0.5 l	0.5 l
Rotation speed at 50 Hz	1,500 min <sup>-1</sup>	3,000 min <sup>-1</sup>	3,000 min <sup>-1</sup>	3,000 min <sup>-1</sup>
Rotation speed at 60 Hz	1,800 min <sup>-1</sup>	3,600 min <sup>-1</sup>	3,600 min <sup>-1</sup>	3,600 min <sup>-1</sup>
Emission sound pressure level without gas ballast at 50 Hz	42 dB (A)	50 dB (A)	51 dB (A)	54 dB (A)
Ultimate pressure with gas ballast	3 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-2</sup> hPa	3 · 10 <sup>-2</sup> hPa	3 · 10 <sup>-2</sup> hPa
Ultimate pressure without gas ballast	3 · 10 <sup>-3</sup> hPa			
Weight	9.6 kg	11.5 kg	16 kg	17 kg
Cooling method, standard	Air	Air	Air	Air
Leak rate safety valve	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s
Rated power 50 Hz	0.075 kW	0.15 kW	0.20 kW	0.25 kW
Rated power 60 Hz	0.090 kW	0.18 kW	0.24 kW	0.30 kW
Pumping speed at 50 Hz	1.25 m <sup>3</sup> /h	2.5 m <sup>3</sup> /h	5 m <sup>3</sup> /h	9.0 m <sup>3</sup> /h
Pumping speed at 60 Hz	1.50 m <sup>3</sup> /h	2.9 m <sup>3</sup> /h	6 m <sup>3</sup> /h	10.5 m <sup>3</sup> /h
Switch	Yes	Yes	Yes	Yes
Protection category	IP 40	IP 40	IP 40	IP 40
Ambient temperature	12–40 °C	12–40 °C	12–40 °C	12–40 °C

Sound pressure level according to ISO 3744, class 2; Typical ultimate pressure according to PNEUROP

### Order numbers

Pump/Motor version	Duo 1.6	Duo 3	Duo 6	Duo 11
1-phase, Worldwide	PK D56 711	PK D57 711	PK D58 711	PK D59 711
1-phase, Europe/Asia	PK D56 712	PK D57 712	PK D58 712	PK D59 712
1-phase, USA	PK D56 707	PK D57 707	PK D58 707	PK D59 707
1-phase, Japan	PK D56 710	PK D57 710	PK D58 710	PK D59 710
DC drive		PK D57 553		
3-phase, Europe/Asia			PK D58 602	PK D59 602
3-phase, Brazil/Korean				
3-phase, Japan				

### Pump/Motor version

3-phase, Europe/Asia	
3-phase, Brazil/Korean	
3-phase, Japan	

<b>Duo 35</b>	<b>Duo 65</b>	<b>Duo 125</b>	<b>Duo 255</b>
DN 40 ISO-KF	DN 40 ISO-KF	DN 63 ISO-F	DN 100 ISO-F
DN 40 ISO-KF	DN 40 ISO-KF	DN 63 ISO-F	DN 100 ISO-F
1500 hPa	1500 hPa	1500 hPa	1500 hPa
3.2 l	4.2 l	14 l	25 l
1,500 min <sup>-1</sup>	1,500 min <sup>-1</sup>	1,000 min <sup>-1</sup>	1,000 min <sup>-1</sup>
1,800 min <sup>-1</sup>	1,800 min <sup>-1</sup>	1,200 min <sup>-1</sup>	1,200 min <sup>-1</sup>
61 dB (A)	61 dB (A)	75 dB (A)	75 dB (A)
3 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-3</sup> hPa	4 · 10 <sup>-3</sup> hPa	4 · 10 <sup>-3</sup> hPa
2 · 10 <sup>-3</sup> hPa	2 · 10 <sup>-3</sup> hPa	2 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-3</sup> hPa
68 kg	75 kg	225 kg	360 kg
Air	Air	Air	Air
≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s
1.5 kW	1.5 kW	4.0 kW	7.5 kW
1.5 kW	1.8 kW	4.5 kW	9.0 kW
32 m <sup>3</sup> /h	62 m <sup>3</sup> /h	115 m <sup>3</sup> /h	250 m <sup>3</sup> /h
36 m <sup>3</sup> /h	70 m <sup>3</sup> /h	135 m <sup>3</sup> /h	300 m <sup>3</sup> /h
No	No	No	No
IP 55	IP 55	IP 55	IP 55
12–40 °C	12–40 °C	12–40 °C	12–40 °C

<b>Duo 35</b>	<b>Duo 65</b>	<b>Duo 125</b>	<b>Duo 255</b>
PK D45 602	PK D46 602	PK D47 602	PK D48 602
PK D45 642	PK D46 642	PK D47 652	PK D48 652
PK D45 630	PK D46 630		

<b>Duo 35 C</b>	<b>Duo 65C</b>
PK D45 202	PK D46 202
PK D45 242	PK D46 242
PK D45 230	PK D46 230

# DUOLINE™ – MAGNETICALLY COUPLED, CORROSIVE MAGNETICALLY COUPLED

## Technical data and order numbers

### Technical data

	Duo 1.6 M	Duo 3 M	Duo 6 M	Duo 11 M
Flange (out)	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF
Flange (in)	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF	DN 16 ISO-KF
Exhaust pressure, max.	1500 hPa	1500 hPa	1500 hPa	1500 hPa
Operating fluid filling	0.4 l	0.4 l	0.5 l	0.5 l
Rotation speed at 50 Hz	1,500 min <sup>-1</sup>	3,000 min <sup>-1</sup>	3,000 min <sup>-1</sup>	3,000 min <sup>-1</sup>
Rotation speed at 60 Hz	1,800 min <sup>-1</sup>	3,600 min <sup>-1</sup>	3,600 min <sup>-1</sup>	3,600 min <sup>-1</sup>
Emission sound pressure level without gas ballast at 50 Hz	42 dB (A)	50 dB (A)	51 dB (A)	54 dB (A)
Ultimate pressure with gas ballast	3 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-2</sup> hPa	3 · 10 <sup>-2</sup> hPa	3 · 10 <sup>-2</sup> hPa
Ultimate pressure without gas ballast	3 · 10 <sup>-3</sup> hPa			
Weight	10.5 kg	12 kg	17.5 kg	19 kg
Cooling method, standard	Air	Air	Air	Air
Leak rate magnetic coupling (MC version)	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s
Leak rate safety valve	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s
Rated power 50 Hz	0.075 kW	0.15 kW	0.20 kW	0.25 kW
Rated power 60 Hz	0.090 kW	0.18 kW	0.24 kW	0.30 kW
Pumping speed at 50 Hz	1.25 m <sup>3</sup> /h	2.5 m <sup>3</sup> /h	5 m <sup>3</sup> /h	9.0 m <sup>3</sup> /h
Pumping speed at 60 Hz	1.50 m <sup>3</sup> /h	2.9 m <sup>3</sup> /h	6 m <sup>3</sup> /h	10.5 m <sup>3</sup> /h
Switch	Yes	Yes	Yes	Yes
Protection category	IP 40	IP 40	IP 40	IP 40
Ambient temperature	12–40 °C	12–40 °C	12–40 °C	12–40 °C

Sound pressure level according to ISO 3744, class 2; Typical ultimate pressure according to PNEUROP

### Order numbers

Pump/Motor version	Duo 1.6 M	Duo 3 M	Duo 6 M	Duo 11 M
1-phase, Worldwide	PK D56 111	PK D57 111	PK D58 111	PK D59 111
1-phase, Europe/Asia	PK D56 112	PK D57 112	PK D58 112	PK D59 112
1-phase, USA	PK D56 107	PK D57 107	PK D58 107	PK D59 107
1-phase, Japan	PK D56 110	PK D57 110	PK D58 110	PK D59 110
DC drive		PK D57 563		
3-phase, Europe/Asia			PK D58 152	PK D59 152
3-phase, Brazil/Korean				
3-phase, Japan				

Pump/Motor version	Duo 3 MC	Duo 6 MC	Duo 11 MC
1-phase, Worldwide	PK D57 211	PK D58 211	PK D59 211
1-phase, Europe/Asia	PK D57 212	PK D58 212	PK D59 212
1-phase, USA			
3-phase, Europe/Asien			
3-phase, Brazil/Korean			
3-phase, Japan			

Duo 11 ATEX	Duo 20 M	Duo 35 M	Duo 65 M	Duo 125 M	Duo 255 M
DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF	DN 63 ISO-F	DN 100 ISO-F
DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF	DN 63 ISO-F	DN 100 ISO-F
1500 hPa					
0.5 l	1.1 l	3.2 l	4.2 l	14 l	25 l
3,000 min <sup>-1</sup>	1,500 min <sup>-1</sup>	1,500 min <sup>-1</sup>	1,500 min <sup>-1</sup>	1,000 min <sup>-1</sup>	1,000 min <sup>-1</sup>
3,600 min <sup>-1</sup>	1,800 min <sup>-1</sup>	1,800 min <sup>-1</sup>	1,800 min <sup>-1</sup>	1,200 min <sup>-1</sup>	1,200 min <sup>-1</sup>
53 dB (A)	55–57 dB (A)	61 dB (A)	61 dB (A)	75 dB (A)	75 dB (A)
3 · 10 <sup>-3</sup> hPa	4 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-3</sup> hPa	4 · 10 <sup>-3</sup> hPa	4 · 10 <sup>-3</sup> hPa
3 · 10 <sup>-3</sup> hPa	2 · 10 <sup>-3</sup> hPa	3 · 10 <sup>-3</sup> hPa			
15.5 kg	44 kg	70 kg	78 kg	245 kg	397 kg
Air	Air	Air	Air	Air	Air
≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s		
≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s
0.25 kW	0.75 kW	1.5 kW	1.5 kW	4.0 kW	7.5 kW
0.30 kW	0.90 kW	1.5 kW	1.8 kW	4.5 kW	9.0 kW
9.0 m <sup>3</sup> /h	20 m <sup>3</sup> /h	32 m <sup>3</sup> /h	62 m <sup>3</sup> /h	115 m <sup>3</sup> /h	250 m <sup>3</sup> /h
10.5 m <sup>3</sup> /h	24 m <sup>3</sup> /h	36 m <sup>3</sup> /h	70 m <sup>3</sup> /h	135 m <sup>3</sup> /h	300 m <sup>3</sup> /h
No	Yes, 1-phase	No	No	No	No
IP 55	IP 54–55	IP 55	IP 55	IP 55	IP 55
12–40 °C					

Duo 11 ATEX	Duo 20 M	Duo 35 M	Duo 65 M	Duo 125 M	Duo 255 M
PK D63 712					
PK D63 707					

PK D59 905	PK D63 105	PK D45 028	PK D46 028	PK D47 152	PK D48 152
	PK D63 115	PK D45 023	PK D46 023		
	PK D63 110				

Duo 20 MC	Duo 35 MC	Duo 65 MC
PK D63 732		
PK D63 727		
PK D63 125	PK D45 027	PK D46 036
		PK D46 025

**Additional models available**

Duo 5 M

PK D61 105

PK D61 707

PK D61 712

Duo 5 MC

PK D61 727

PK D61 732

Duo 10 M

PK D62 105

PK D62 707

PK D62 712

Duo 10 MC

PK D62 727

PK D62 732

## Accessories

### Order numbers accessories

	Duo 1.6 / M	Duo 3 / M	Duo 6 / M	Duo 11 / M
KAS, condensate separator	PK Z10 003	PK Z10 003	PK Z10 003	PK Z10 003
OME S, oil mist filter, simple version	PK Z40 000	PK Z40 000	PK Z40 000	PK Z40 000
OME M, oil mist filter high gas throughput	PK Z40 003	PK Z40 003	PK Z40 003	PK Z40 003
ODK, oil return unit from OME S to pump	PK 005 968 -T			
ODK, oil return unit from OME M to pump	PK 006 080 -T			
SAS, dust separator	PK Z60 506	PK Z60 506	PK Z60 506	PK Z60 506
KLF, cold trap	-	-	-	-
URB, catalytic trap	-	-	-	-
ST, sorption trap	PK Z70 011	PK Z70 011	PK Z70 011	PK Z70 011
Operations monitoring unit 1 (oil niveau)	PK 196 148 -T			
Operations monitoring unit 2 (oil niveau, oil temperature)	PK 196 147 -T			
Operations monitoring unit 3 (oil niveau, oil temperature, exhaust pressure)	PK 196 146 -T			
Operating fluid level monitoring	-	-	-	-
Temperature sensor for operating fluid	-	-	-	-
Oil pressure switch	-	-	-	-
OFM, mechanical oil filter	-	-	-	-
Gas ballast valve with magnet valve	PK 194 343 -U			
Gas ballast valve C version	PK 194 144 -U			
Resistor tripping unit (PTC) for 3-ph motor	-	-	P 4768 052 FQ	P 4768 052 FQ
Mains cable 2 m with safety plug	PK 050 109	PK 050 109	PK 050 109	PK 050 109
Mains cable 2 m with NEMA-plug	PK 050 110	PK 050 110	PK 050 110	PK 050 110
Mains cable 3 m without plug	PK 050 111	PK 050 111	PK 050 111	PK 050 111
Operating fluid P3, mineral oil, 1 l	PK 001 106 -T			
Operating fluid P3, mineral oil, 5 l	PK 001 107 -T			
Operating fluid P3, mineral oil, 20 l	PK 001 108 -T			
Operating fluid D1, synthetic diester based oil, 1 l	PK 005 875 -T			
Operating fluid D1, synthetic diester based oil, 5 l	PK 005 876 -T			
Operating fluid D1, synthetic diester based oil, 20 l	PK 005 877 -T			

	Duo 20 M	Duo 35 / M	Duo 65 / M	Duo 125 / M	Duo 255 / M
KAS, condensate separator	PK Z10 033	PK Z10 008	PK Z10 008	PK Z10 010	PK Z10 012
OME S, oil mist filter, simple version	104200	104887	104887	-	-
OME M, oil mist filter high gas throughput	PK Z40 158	PK Z40 150	PK Z40 150	PK Z40 010	PK Z40 012
ODK, oil return unit from OME S to pump	-	-	-	-	-
ODK, oil return unit from OME M to pump	PK 196 172 -T	PK 005 950 -T	PK 005 950 -T	PK Z90 065	PK Z90 065
SAS, dust separator	PK Z60 508	PK Z60 510	PK Z60 510	PK Z60 511	PK Z60 512
KLF, cold trap	PK Z80 006	PK Z80 008	PK Z80 008	PK Z80 010	-
URB, catalytic trap, 115 V	PT U10 761	PT U10 261	PT U10 261	-	-
URB, catalytic trap, 230 V	PT U10 760	PT U10 260	PT U10 260	-	-
ST, sorption trap	104107	115 V: 104371 230 V: 053380	115 V: 104371 230 V: 053380	-	-
Operations monitoring unit 1 (oil niveau)	PK 196 148 -T	PK 223 718 AU	PK 223 718 AU	-	-
Operations monitoring unit 2 (oil niveau, oil temperature)	PK 196 147 -T	-	-	-	-
Operations monitoring unit 3 (oil niveau, oil temperature, exhaust pressure)	PK 196 146 -T	PK 223 739 AU	PK 223 739 AU	-	-
Operating fluid level monitoring	-	-	-	PK 006 001 -T	PK 006 001 -T
Temperature sensor for operating fluid	-	-	-	PK 006 040 -T	PK 006 040 -T
Oil pressure switch	PK 196 484 -T	PK 223 720 -U	PK 223 720 -U	PK 223 806 -T	PK 223 806 -T
Oil pressure switch for pumps with OFM		PK 223 741 -U	PK 223 741 -U		
OFM, mechanical oil filter	-	PK Z90 321	PK Z90 321	PK Z90 340	PK Z90 341
Gas ballast valve with magnet valve	-	PK 223 717 -U	PK 223 717 -U	PK 215 795 -T	PK 215 795 -T
Gas ballast valve C version	-	PK 223 713 -U	PK 223 713 -U	-	-
Resistor tripping unit (PTC) for 3-ph motor	P 4768 052 FQ	P 4768 052 FQ	P 4768 052 FQ	P 4768 052 FQ	P 4768 052 FQ
Mains cable 2 m with safety plug	-	-	-	-	-
Mains cable 2 m with NEMA-plug	-	-	-	-	-
Mains cable 3 m without plug	-	-	-	-	-
Operating fluid P3, mineral oil, 1 l	PK 001 106 -T	PK 001 106 -T	PK 001 106 -T	PK 001 106 -T	PK 001 106 -T
Operating fluid P3, mineral oil, 5 l	PK 001 107 -T	PK 001 107 -T	PK 001 107 -T	PK 001 107 -T	PK 001 107 -T
Operating fluid P3, mineral oil, 20 l	PK 001 108 -T	PK 001 108 -T	PK 001 108 -T	PK 001 108 -T	PK 001 108 -T
Operating fluid D1, synthetic diester based oil, 1 l	PK 005 875 -T	PK 005 875 -T	PK 005 875 -T	PK 005 875 -T	PK 005 875 -T
Operating fluid D1, synthetic diester based oil, 5 l	PK 005 876 -T	PK 005 876 -T	PK 005 876 -T	PK 005 876 -T	PK 005 876 -T
Operating fluid D1, synthetic diester based oil, 20 l	PK 005 877 -T	PK 005 877 -T	PK 005 877 -T	PK 005 877 -T	PK 005 877 -T

	Duo 3 MC	Duo 6 MC	Duo 11 MC	Duo 20 MC	Duo 35/65 C/MC
KAS C, condensate separator, C version	-	-	-	PK Z10 406	PK Z10 408
OME C, oil mist filter, C version	PK Z40 400	PK Z40 400	PK Z40 400	066849	PK Z40 152
ODK, oil return unit from OME C to pump	PK 005 968 -T	PK 005 968 -T	PK 005 968 -T	-	PK 005 950 -T
KLF, cold trap	-	-	-	PK Z80 006	PK Z40 008
ST, sorption trap	-	-	-	115 V: 066845 230 V: 066841	115 V: 104371 230 V: 053380
Oil pressure switch	-	-	-	-	PK 223 720 -U
Oil pressure switch for pumps with OFM	-	-	-	-	PK 223 741 -U
OFM, mechanical oil filter	-	-	-	-	PK Z90 321
OFC, chemical oil filter	-	-	-	-	PK Z90 320
Gas ballast valve with magnet valve	PK 194 343 -U	PK 194 343 -U	PK 194 343 -U	-	PK 223 717 -U
Resistor tripping unit (PTC) for 3-ph motor	-	P 4768 052 FQ	P 4768 052 FQ	P 4768 052 FQ	P 4768 052 FQ
Mains cable 2 m with safety plug	PK 050 109	PK 050 109	PK 050 109	-	-
Mains cable 2 m with NEMA-plug	PK 050 110	PK 050 110	PK 050 110	-	-
Mains cable 3 m without plug	PK 050 111	PK 050 111	PK 050 111	-	-
Operating fluid F4, Perfluorpolyether, 0.25 l	PK 005 885 -T	-			
Operating fluid F4, Perfluorpolyether, 0.5 l	PK 005 886 -T	-			
Operating fluid F4, Perfluorpolyether, 1 l	PK 005 887 -T	-			
Operating fluid A113, Perfluorpolyether, 0.5 l	-	-	-	-	064657
Operating fluid A113, Perfluorpolyether, 2.5 l	-	-	-	-	064659

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