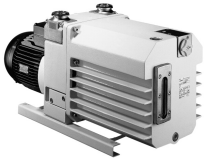


# Duo 65/M

Dual-stage rotary vane pumps with a pumping speed up to 70 m<sup>3</sup>/h:





Similar Image

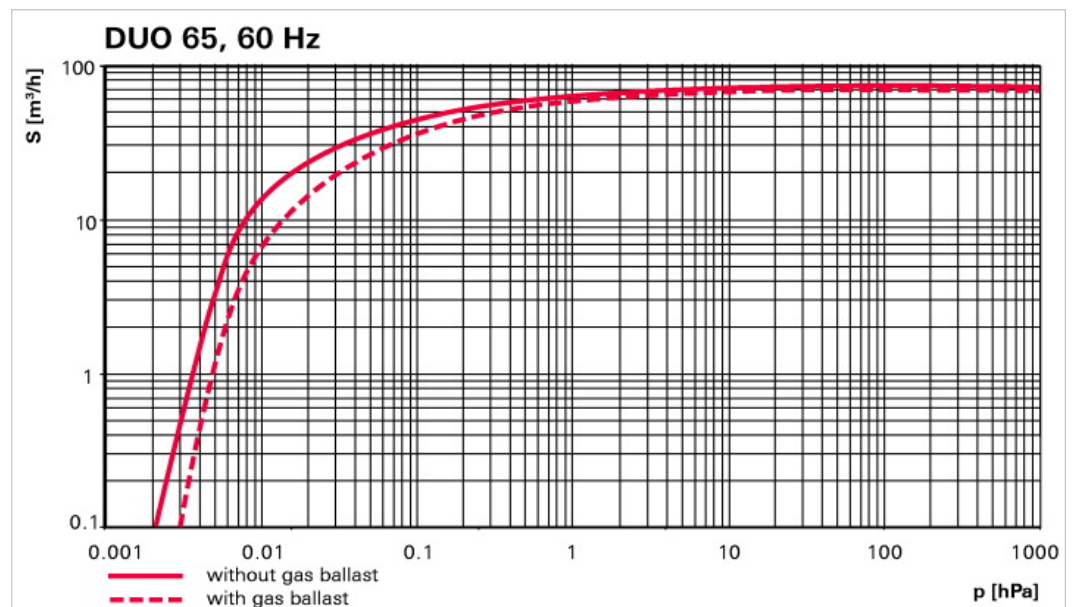
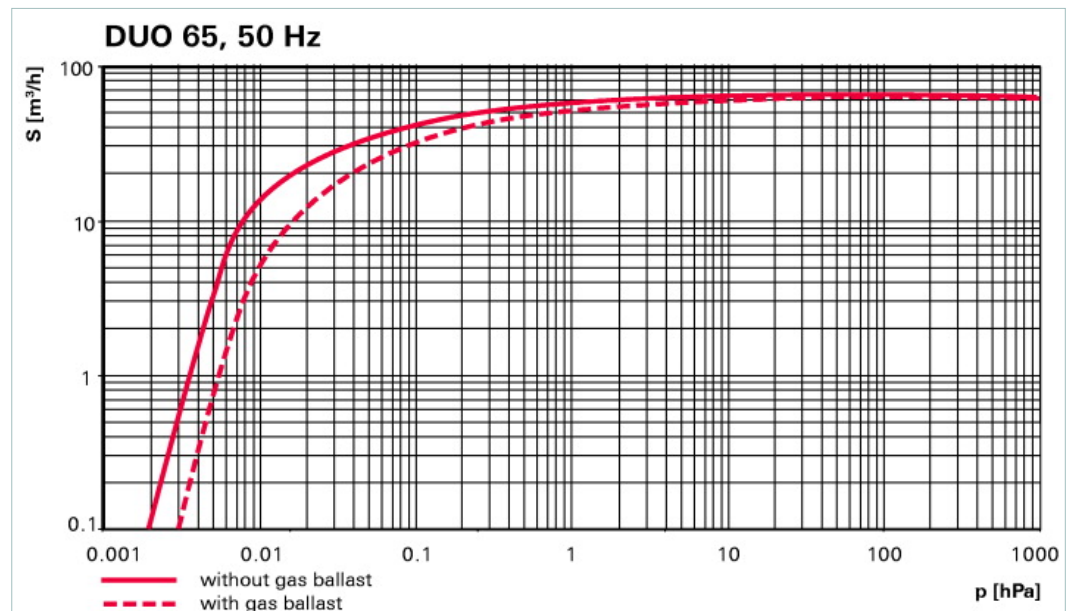
## Duo 65 M, 3-phase motor, 3TF, 230/400 V, 50 Hz; 265/460 V, 60 Hz

- Dual-stage, high-performance rotary vane pump with a pumping speed up to 70 m<sup>3</sup>/h
- With 3-phase motor
- With temperature sensor (3TF) for optimum motor protection
- Integrated gas ballast and HV safety valve
- For all low and medium vacuum applications
- Magnetically coupled
- Special feature: Various motor voltages for worldwide employment

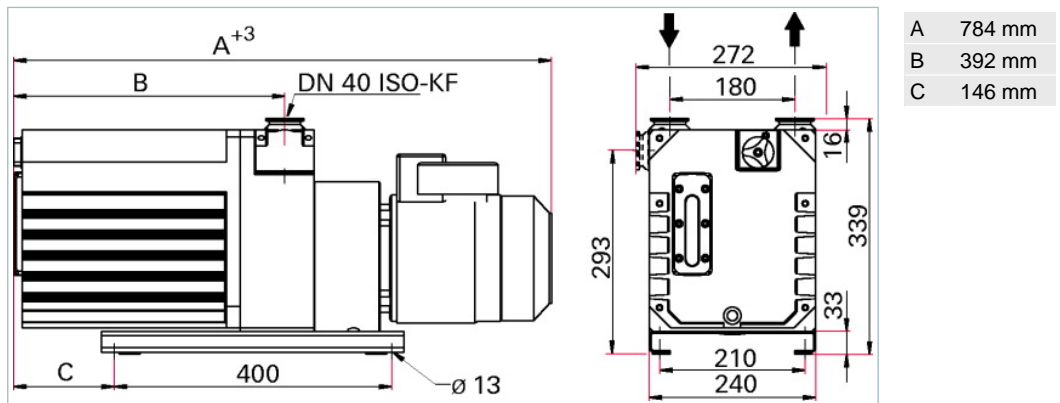
M = Magnetically coupled

MC = Corrosive gas version, magnetically coupled

TF = Temperature sensor



## Dimensions



Technical Data	Duo 65 M, 3-phase motor, 3TF, 230/400 V, 50 Hz; 265/460 V, 60 Hz
Ambient temperature	12-40 °C   53.6-104 °F   285-313 K
Cooling method, standard	Air
Emission sound pressure level without gas ballast at 50 Hz	≤ 61 dB (A)
Exhaust pressure, max.	1,500 hPa   1,125 Torr   1,500 mbar
Exhaust pressure, min.	250 hPa   187.5 Torr   250 mbar
Flange (in)	DN 40 ISO-KF
Flange (out)	DN 40 ISO-KF
Leak rate magnetic coupling	≤ 1 · 10 <sup>-7</sup> Pa m <sup>3</sup> /s   ≤ 7.5 · 10 <sup>-7</sup> Torr l/s   ≤ 1 · 10 <sup>-6</sup> mbar l/s
Leak rate safety valve	≤ 1 · 10 <sup>-5</sup> Pa m <sup>3</sup> /s   ≤ 7.5 · 10 <sup>-5</sup> Torr l/s   ≤ 1 · 10 <sup>-4</sup> mbar l/s
Magnetic coupling	yes
Mains requirement: voltage 50 Hz	230/400 (± 5 %) V
Mains requirement: voltage 60 Hz	265/460 (± 5 %) V
Motor protection	3TF
Motor version	3-phase Motor
Operating fluid	P3
Operating fluid filling	4.2 l
Protection category	IP 55
Pumping speed at 50 Hz	62 m <sup>3</sup> /h
Pumping speed at 60 Hz	70 m <sup>3</sup> /h
Rated power 50 Hz	1.5 kW
Rated power 60 Hz	1.8 kW
Rotation speed at 50 Hz	1500 min <sup>-1</sup>
Rotation speed at 60 Hz	1800 min <sup>-1</sup>
Ultimate pressure with gas ballast	3 · 10 <sup>-3</sup> hPa   2.25 · 10 <sup>-3</sup> Torr   3 · 10 <sup>-3</sup> mbar
Ultimate pressure without gas ballast	2 · 10 <sup>-3</sup> hPa   1.5 · 10 <sup>-3</sup> Torr   2 · 10 <sup>-3</sup> mbar
Weight	76 kg   167.55 lb

Typical ultimate pressure according to PNEUROP

## Order number

Duo 65/M

PK D46 035

Accessories	
<b>Accessories</b>	
Adapter UNO/DUO 35/65 for Okta 250 A	PK 223 787 -T
Adapter UNO/DUO 35/65 for Okta 500 A / 1000 A	PK 224 629 -T
Blank flange gas ballast valve with O-ring and screws	PK 223 797 -T
FAK 040, activated carbon filter	PK Z30 008
Gas ballast valve complete in C-version with SAS 16	PK 223 747 -U
Gas ballast valve-conversion kit corrosive version with Hose nozzle	PK 223 713 -U
Gas ballast valve-conversion kit corrosive version with magnetic valve	PK 223 717 -U
KAS 40, condensate separator for pumping speeds up to 100 m <sup>3</sup> /h	PK Z10 008
KLF 040, cold trap	PK Z80 008
OFC 35/65, chemical oil filter	PK Z90 320
OFM 35/65, mechanical oil filter	PK Z90 321
Oil pressure switch for Duo 35/65; Duo 35/65 MC	PK 223 720 -U
Oil pressure switch for Duo 35/65 with OFC/OFM	PK 223 741 -U
Oil return unit from ONF 35/65 to Duo 35/65	PK 005 950 -T
ONF 35/65, oil mist filter for Duo 35/65, Duo 35/65 M	PK Z40 150
ONFR 35/65, oil mist filter with oil return to pump for Duo 35/65, Duo 35/65 M	PK Z40 151
Operations monitoring unit 1 for Duo 35/65	PK 223 718 AU
Operations monitoring unit 3 for Duo 35/65, Duo 125/255	PK 223 739 -U
Soft starter 3.6 A	P 4769 001
Soft starter 6.5 A	P 4769 003
Soft starter 9 A	P 4769 004
URB 040, catalytic trap, 115 V	PT U10 261
URB 040, catalytic trap, 230 V	PT U10 260
ZFO 040, zeolite trap	PK Z70 008
<b>Accessories HenaLine</b>	
SAS 40, DN 40 ISO-KF, polyester filter	PK Z60 510
<b>Accessories UnoLine Plus</b>	
PTC-resistor tripping device	P 4768 051 FQ
<b>Consumables</b>	
P3, mineral oil, 1 l	PK 001 106 -T
P3, mineral oil, 5 l	PK 001 107 -T
P3, mineral oil, 20 l	PK 001 108 -T
D1, synthetic diester based oil, 1 l	PK 005 875 -T
D1, synthetic diester based oil, 5 l	PK 005 876 -T
D1, synthetic diester based oil, 20 l	PK 005 877 -T
F5, Perfluoropolyether, 0.5 l	PK 001 851 -T
F5, Perfluoropolyether, 1 l	PK 001 852 -T
F5, Perfluoropolyether, 5 l	PK 001 853 -T