

Note! All technical data are based on a working pressure of 6 bar and with oil.
Speed tolerance accuracy is $\pm 10\%$.

CE II 2GD c IIC T3 (200°C) X

For 1600, 3200, 5000, 6000 Watts

Note! Inlet and exhaust air flows are critical for reaching the best performances.



A: Basic reversible motor without gear box (A), IEC flange, ATEX, with planetary (B) or spur (D) gear boxes

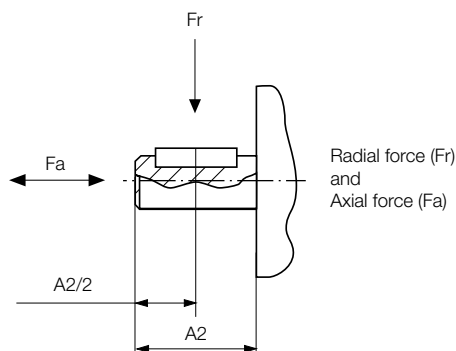
Max power	Free speed	Nominal speed	Nominal torque	Min starting torque	Air consumption	Connection	Min pipe ID	Weight	Mounting	Max permissible shaft loading		At A2/2	Gear box type	Order code
Watt	rpm	rpm	Nm	Nm	l/s	BSPP	mm	kg	Flange	F radial (N)	F axial (N)	mm		
1600	9000	4500	3.4	5.1	31.7	G1/2	15/19	5.2	IEC71	1000	600	15.0	Without	P1V-A160A0900
1600	3000	1500	10.2	15.3	31.7	G1/2	15/19	9.5	IEC80	550	1500	20.0	Spur	P1V-A160D0300
1600	1400	700	21.8	32.7	31.7	G1/2	15/19	9.5	IEC80	1200	880	20.0	Helical	P1V-A160B0140
3200	7000	3500	8.7	13.1	65.0	G3/4	19/25	10.3	IEC80	1400	700	20.0	Without	P1V-A320A0700
3200	3000	1500	20.4	30.6	65.0	G3/4	19/25	15.4	IEC90	800	1450	25.0	Spur	P1V-A320D0300
3200	1400	700	43.7	65.5	65.0	G3/4	19/25	13.6	IEC90	1600	1350	25.0	Helical	P1V-A320B0140
5000	6000	3000	15.9	23.9	96.7	G1	25/32	17.0	IEC90	1900	900	25.0	Without	P1V-A500A0600
5000	3000	1500	31.8	47.7	96.7	G1	25/32	25.8	IEC100	1250	950	30.0	Spur	P1V-A500D0300
5000	1450	725	65.9	98.8	96.7	G1	25/32	26.8	IEC100	2650	1150	30.0	Helical	P1V-A500B0145
6000	7000	3500	16.4	24.6	131.7	G1	25/32	17.0	IEC90	1900	900	25.0	Without	P1V-A600A0700
6000	3500	1750	32.7	49.1	131.7	G1	25/32	25.8	IEC100	1250	950	30.0	Spur	P1V-A600D0350
6000	1600	800	71.6	107.4	131.7	G1	25/32	26.8	IEC100	2650	1150	30.0	Helical	P1V-A600B0160
9000	6000	3000	28.6	43.0	166.7	G1	25/32	33.0	IEC112A	7500	1100	30.0	Without	P1V-A900A0600
18000	6000	3000	57.3	85.9	333.3	G2	43/63.5	54.0	IEC112A	7500	1100	30.0	Without	P1V-AJ00A0600

Maximum admissible speed (idling)

Air consumption at the maximum air motor power

Permitted shaft loadings

Max permitted load on output shaft for basic motors (based on 10,000,000 revolutions of the output shaft, with 90% probable service life for ball bearings).



Holding Brakes

Holding brakes are designed for the motors without gear box and can be ordered fully mounted on or added on later. The brake is fixed on the front of the motor.

Motor type	Order code	Brake torque Nm
P1V-A160A0900	P1V-A/445709B	*
P1V-A320A0700		*
P1V-A320D0300		*
P1V-A320B0140		*
P1V-A500A0600	P1V-A/446196A	*
P1V-A500D0300		*
P1V-A500B0145		*
		*

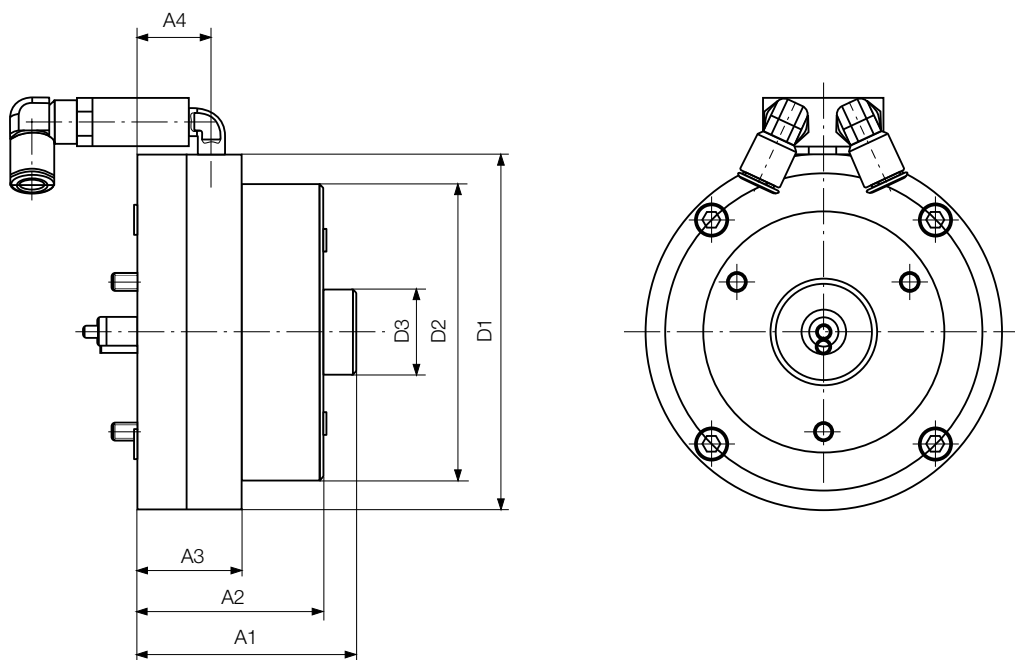
*) The braking torque is generally double the nominal torque.

The holding brake is not designed for use with a different drive system.

Please only use it in combination with the stated motor types.

For ATEX conformity, please contact Technical Sales.

Dimensions (mm)



Order code	Dimensions of the braking device (mm)						
	A1	A2	A3	A4	D1	D2	D3
P1V-A/445709B	72.5	61.5	34.5	24.5	118	98	28
P1V-A/445711B	107	98	43.5	35.5	190	162	28
P1V-A/445713B	107	98	43.5	35.5	190	162	28

P1V-A160A0900

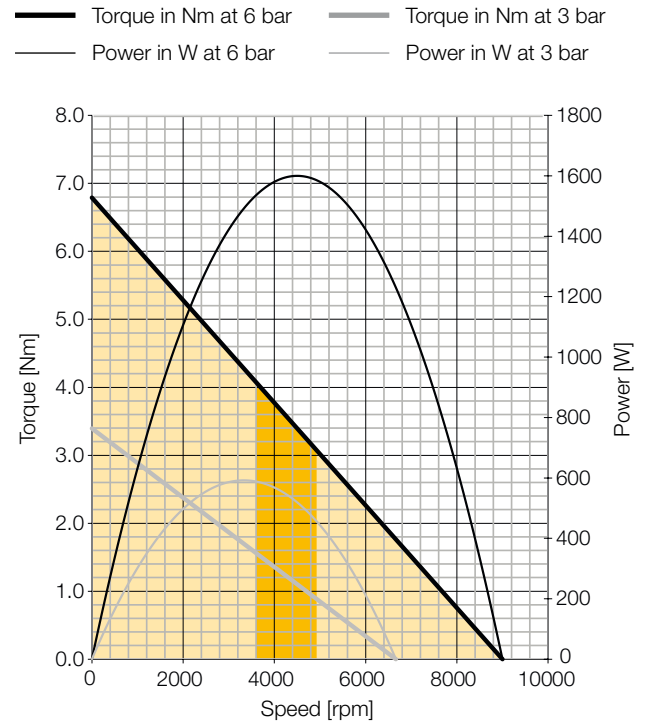
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	1600
Free speed [rpm]	9000
Nominal speed [rpm]	4500
Nominal torque [Nm]	3,4
Min. starting torque [Nm]	5,1
Stall torque [Nm]	6,5
Working pressure [bar]	3 to 7*
Air consumption [l/s]	31,7
Min pipe ID inlet/outlet [mm]	15 / 19
Connection [BSPP]	G1/2
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	5,2
Flange mounting	IEC71
Gear box type	None
Max. shaft radial force [N]	1000
Max. shaft axial force [N]	600
At A2/2 [mm]	15

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



P1V-A160D0300

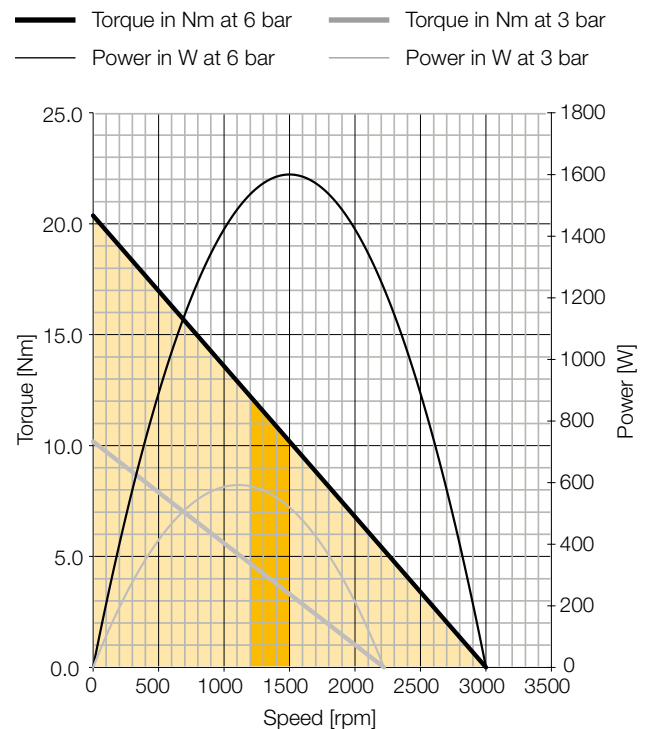
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	1600
Free speed [rpm]	3000
Nominal speed [rpm]	1500
Nominal torque [Nm]	10,2
Min. starting torque [Nm]	15,3
Stall torque [Nm]	19,4
Working pressure [bar]	3 to 7*
Air consumption [l/s]	31,7
Min pipe ID inlet/outlet [mm]	15 / 19
Connection [BSPP]	G1/2
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	9,5
Flange mounting	IEC80
Gear box type	Spur
Max. shaft radial force [N]	550
Max. shaft axial force [N]	1500
At A2/2 [mm]	20

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



P1V-A160B0140

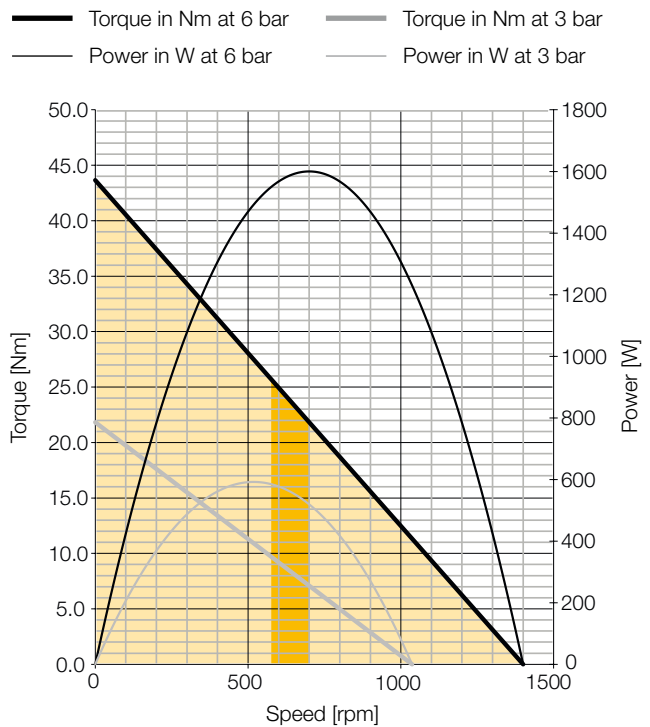
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	1600
Free speed [rpm]	1400
Nominal speed [rpm]	700
Nominal torque [Nm]	21,8
Min. starting torque [Nm]	32,7
Stall torque [Nm]	41,5
Working pressure [bar]	3 to 7*
Air consumption [l/s]	31,7
Min pipe ID inlet/outlet [mm]	15 / 19
Connection [BSPP]	G1/2
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	9,5
Flange mounting	IEC80
Gear box type	Planetary
Max. shaft radial force [N]	1200
Max. shaft axial force [N]	900
At A2/2 [mm]	20

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 700 to 560

Optimum working torque range [Nm] 21,8 to 26,2

P1V-A320A0700

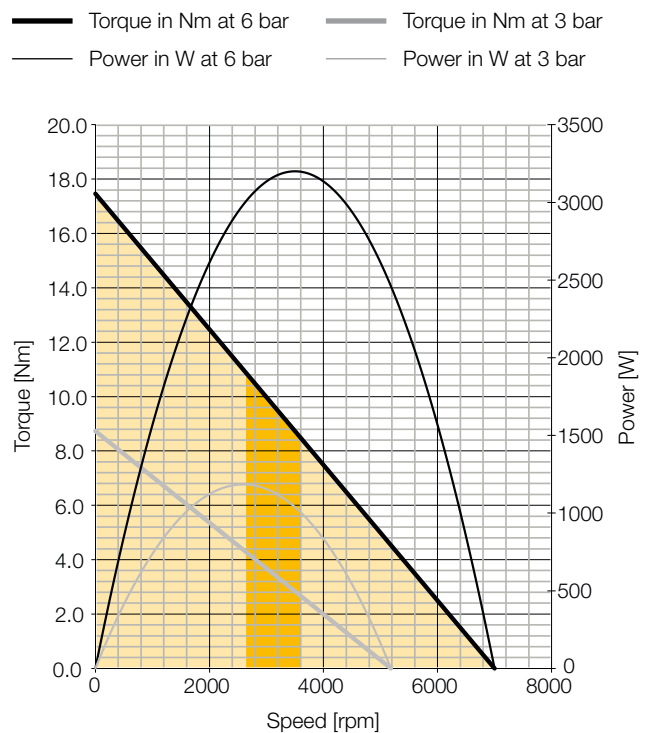
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	3200
Free speed [rpm]	7000
Nominal speed [rpm]	3500
Nominal torque [Nm]	8,7
Min. starting torque [Nm]	13,1
Stall torque [Nm]	16,6
Working pressure [bar]	3 to 7*
Air consumption [l/s]	65,0
Min pipe ID inlet/outlet [mm]	19 / 25
Connection [BSPP]	G3/4
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	10,3
Flange mounting	IEC80
Gear box type	None
Max. shaft radial force [N]	1400
Max. shaft axial force [N]	700
At A2/2 [mm]	20

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 3500 to 2800

Optimum working torque range [Nm] 8,7 to 10,5

P1V-A320D0300

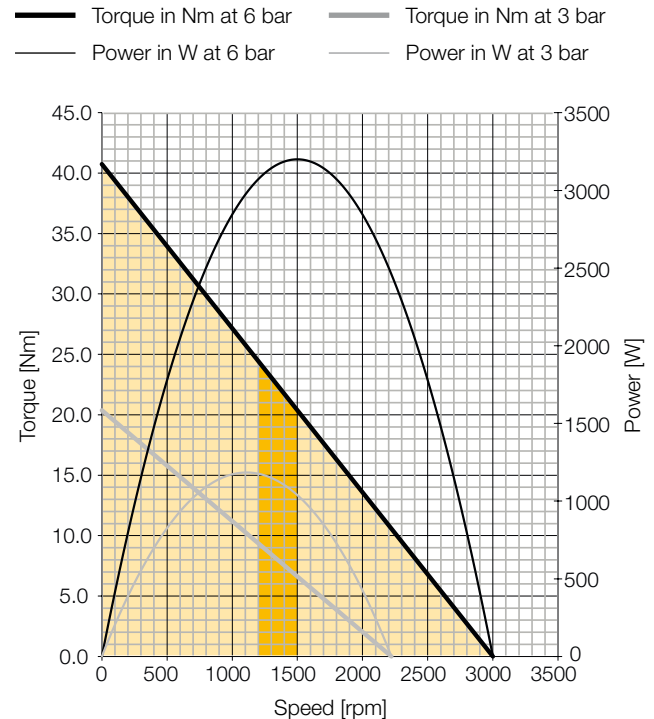
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	3200
Free speed [rpm]	3000
Nominal speed [rpm]	1500
Nominal torque [Nm]	20,4
Min. starting torque [Nm]	30,6
Stall torque [Nm]	38,7
Working pressure [bar]	3 to 7*
Air consumption [l/s]	65,0
Min pipe ID inlet/outlet [mm]	19 / 25
Connection [BSPP]	G3/4
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	15,4
Flange mounting	IEC90
Gear box type	Spur
Max. shaft radial force [N]	800
Max. shaft axial force [N]	1450
At A2/2 [mm]	25

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



P1V-A320B0140

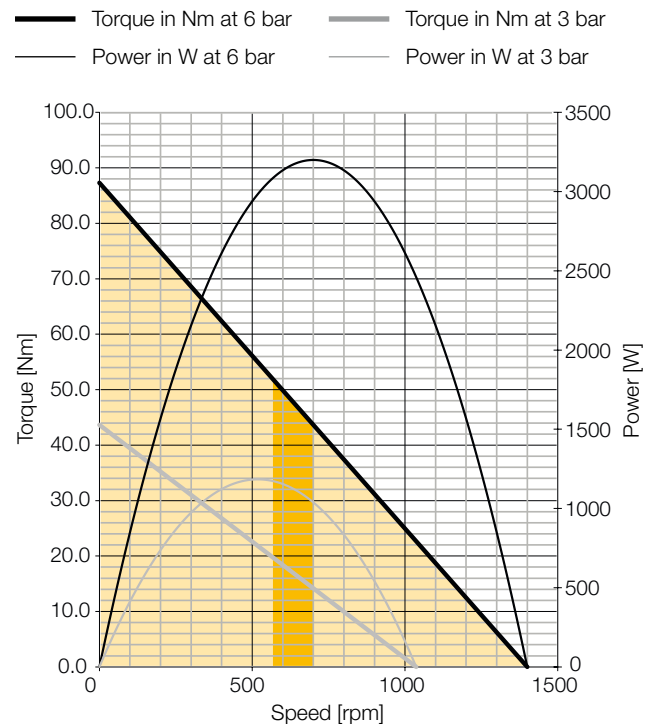
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	3200
Free speed [rpm]	1400
Nominal speed [rpm]	700
Nominal torque [Nm]	43,7
Min. starting torque [Nm]	65,5
Stall torque [Nm]	82,9
Working pressure [bar]	3 to 7*
Air consumption [l/s]	65,0
Min pipe ID inlet/outlet [mm]	19 / 25
Connection [BSPP]	G3/4
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	13,6
Flange mounting	IEC90
Gear box type	Helical
Max. shaft radial force [N]	1600
Max. shaft axial force [N]	1350
At A2/2 [mm]	25

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



P1V-A500A0600

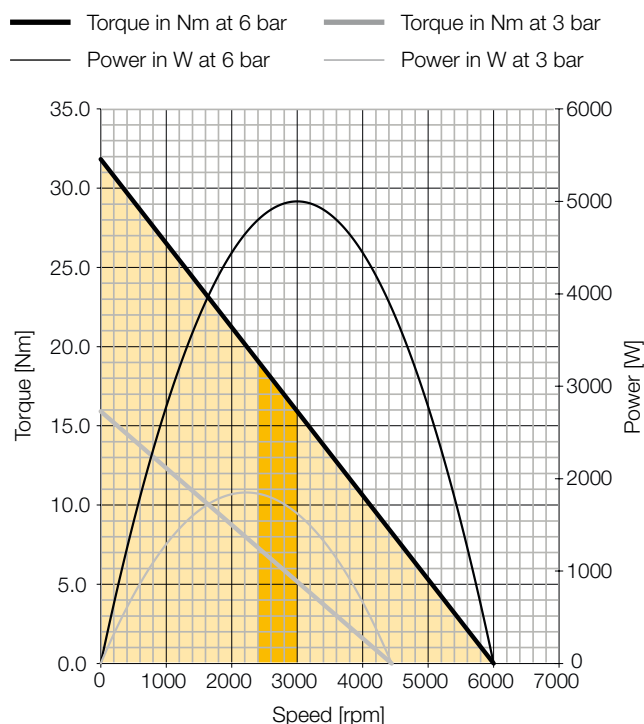
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	5000
Free speed [rpm]	6000
Nominal speed [rpm]	3000
Nominal torque [Nm]	15,9
Min. starting torque [Nm]	23,9
Stall torque [Nm]	30,2
Working pressure [bar]	3 to 7*
Air consumption [l/s]	96,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	17
Flange mounting	IEC90
Gear box type	None
Max. shaft radial force [N]	1900
Max. shaft axial force [N]	900
At A2/2 [mm]	25

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 3000 to 2400

Optimum working torque range [Nm] 15,9 to 19,1

P1V-A500D0300

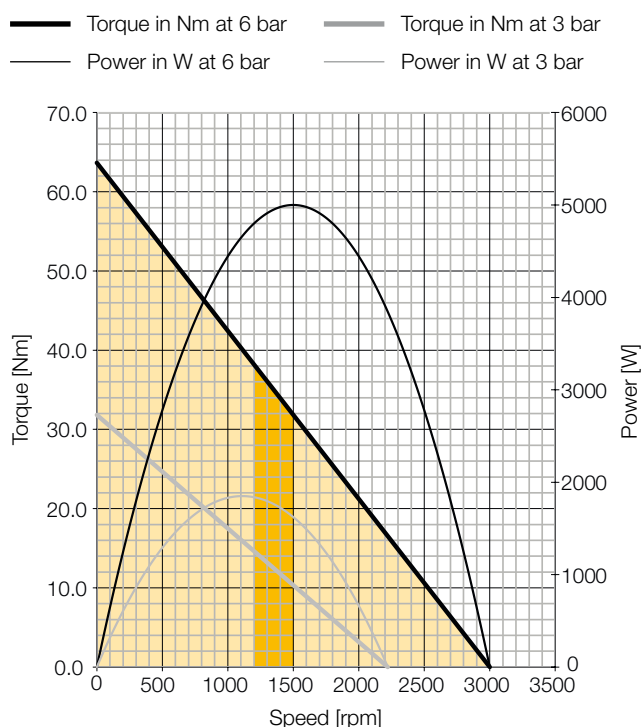
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	5000
Free speed [rpm]	3000
Nominal speed [rpm]	1500
Nominal torque [Nm]	31,8
Min. starting torque [Nm]	47,7
Stall torque [Nm]	60,5
Working pressure [bar]	3 to 7*
Air consumption [l/s]	96,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	25,8
Flange mounting	IEC100
Gear box type	Spur
Max. shaft radial force [N]	1250
Max. shaft axial force [N]	950
At A2/2 [mm]	30

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 1500 to 1200

Optimum working torque range [Nm] 31,8 to 38,2

P1V-A500B0145

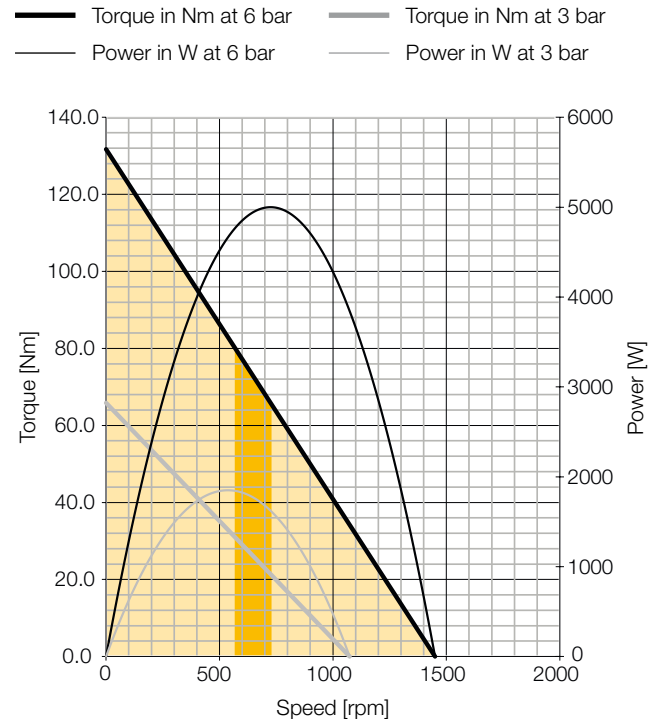
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	5000
Free speed [rpm]	1450
Nominal speed [rpm]	725
Nominal torque [Nm]	65,9
Min. starting torque [Nm]	98,8
Stall torque [Nm]	125,1
Working pressure [bar]	3 to 7*
Air consumption [l/s]	96,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	26,8
Flange mounting	IEC100
Gear box type	Helical
Max. shaft radial force [N]	2650
Max. shaft axial force [N]	1150
At A2/2 [mm]	30

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



P1V-A600A0700

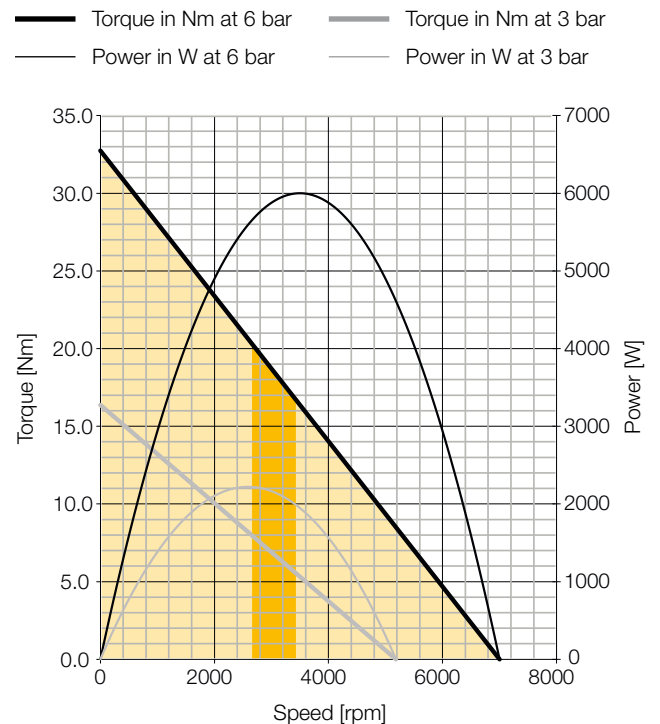
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	6000
Free speed [rpm]	7000
Nominal speed [rpm]	3500
Nominal torque [Nm]	16,4
Min. starting torque [Nm]	24,6
Stall torque [Nm]	31,1
Working pressure [bar]	3 to 7*
Air consumption [l/s]	131,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	17,0
Flange mounting	IEC90
Gear box type	None
Max. shaft radial force [N]	1900
Max. shaft axial force [N]	900
At A2/2 [mm]	25

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



P1V-A600D0350

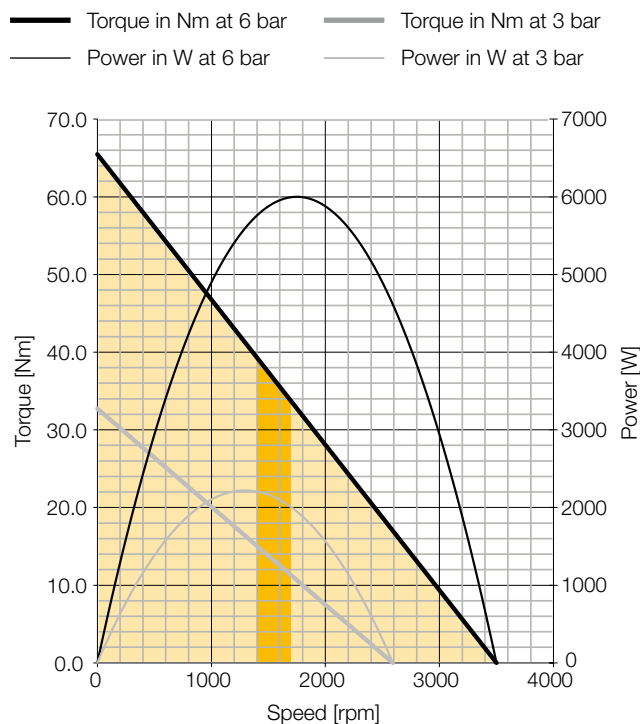
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	6000
Free speed [rpm]	3500
Nominal speed [rpm]	1750
Nominal torque [Nm]	32,7
Min. starting torque [Nm]	49,1
Stall torque [Nm]	62,2
Working pressure [bar]	3 to 7*
Air consumption [l/s]	131,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	25,8
Flange mounting	IEC100
Gear box type	Spur
Max. shaft radial force [N]	1250
Max. shaft axial force [N]	880
At A2/2 [mm]	30

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 1750 to 1400
 Optimum working torque range [Nm] 32,7 to 39,3

P1V-A600B0160

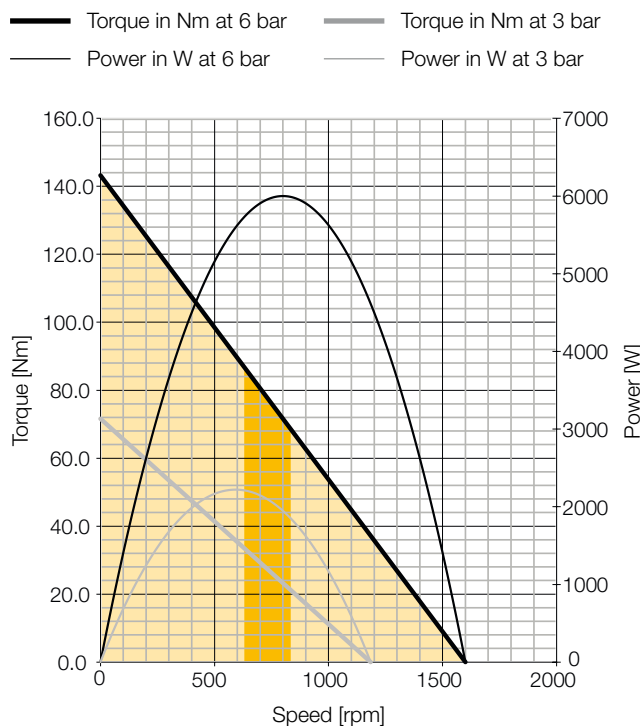
ATEX Ex II 2GD c IIC T3 (200°C) X

Technical data

Max. power [Watt]	6000
Free speed [rpm]	1600
Nominal speed [rpm]	800
Nominal torque [Nm]	71,6
Min. starting torque [Nm]	107,4
Stall torque [Nm]	136,1
Working pressure [bar]	3 to 7*
Air consumption [l/s]	131,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C -20 to +40°C in explosive atmosphere
Weight [kg]	26,8
Flange mounting	IEC100
Gear box type	Helical
Max. shaft radial force [N]	2650
Max. shaft axial force [N]	1150
At A2/2 [mm]	30

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 800 to 640
 Optimum working torque range [Nm] 71,6 to 85,9

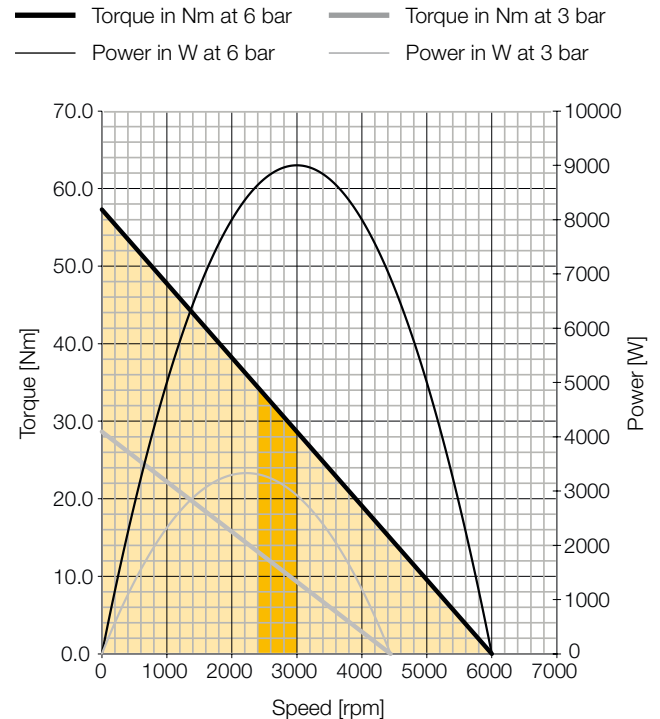
P1V-A900A0600

Technical data

Max. power [Watt]	18000
Free speed [rpm]	6000
Nominal speed [rpm]	3000
Nominal torque [Nm]	28,6
Min. starting torque [Nm]	43,0
Stall torque [Nm]	54,4
Working pressure [bar]	3 to 7*
Air consumption [l/s]	166,7
Min pipe ID inlet/outlet [mm]	25 / 32
Connection [BSPP]	G1
Working temperature	-20° to +110°C
Weight [kg]	33
Flange mounting	IEC112A
Gear box type	None
Max. shaft radial force [N]	7500
Max. shaft axial force [N]	1100
At A2/2 [mm]	30

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power



Optimum working speed range [rpm] 3000 to 2400

Optimum working torque range [Nm] 28,6 to 34,4

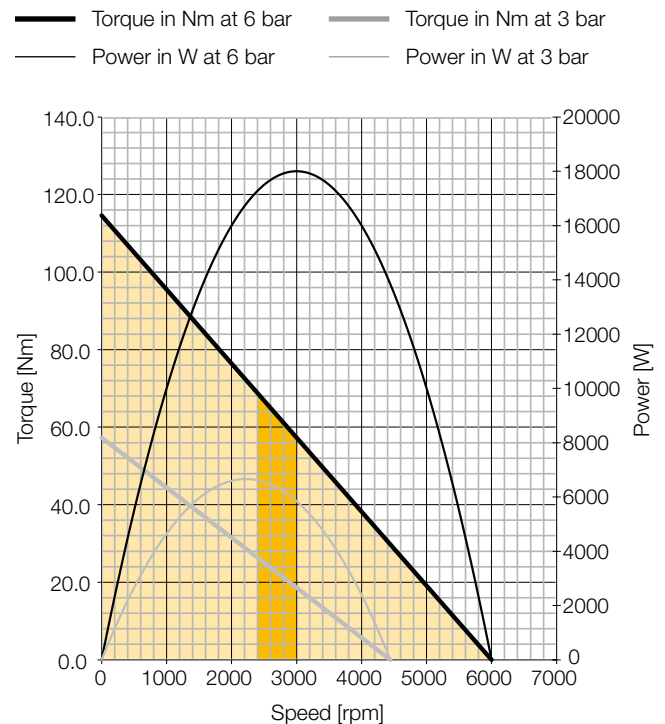
P1V-AJ00A0600

Technical data

Max. power [Watt]	18000
Free speed [rpm]	6000
Nominal speed [rpm]	3000
Nominal torque [Nm]	57,3
Min. starting torque [Nm]	85,9
Stall torque [Nm]	108,9
Working pressure [bar]	3 to 7*
Air consumption [l/s]	333,3
Min pipe ID inlet/outlet [mm]	43 / 63,5
Connection [BSPP]	G2
Working temperature	-20° to +110°C
Weight [kg]	54,0
Flange mounting	IEC112A
Gear box type	None
Max. shaft radial force [N]	7500
Max. shaft axial force [N]	1100
At A2/2 [mm]	30

* 6 in explosive atmosphere

Torque & speed curves / Air Motor Power

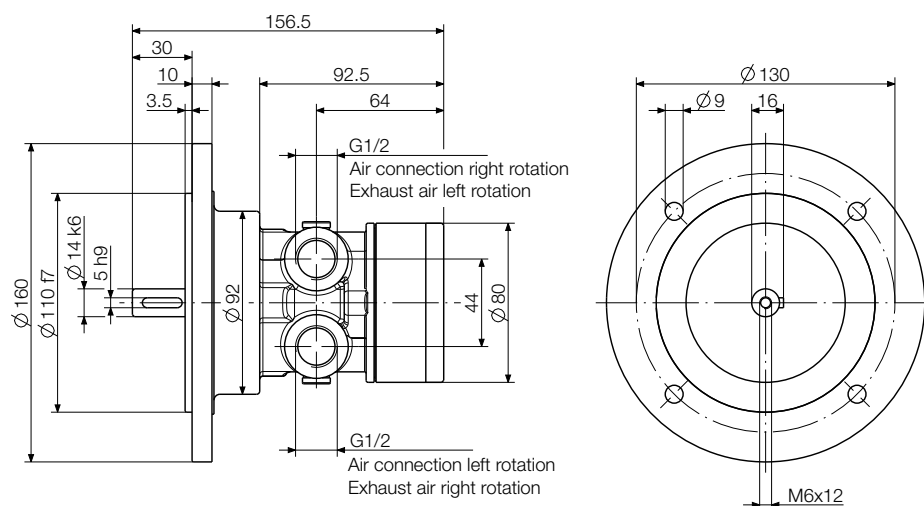


Optimum working speed range [rpm] 3000 to 2400

Optimum working torque range [Nm] 57,3 to 68,8

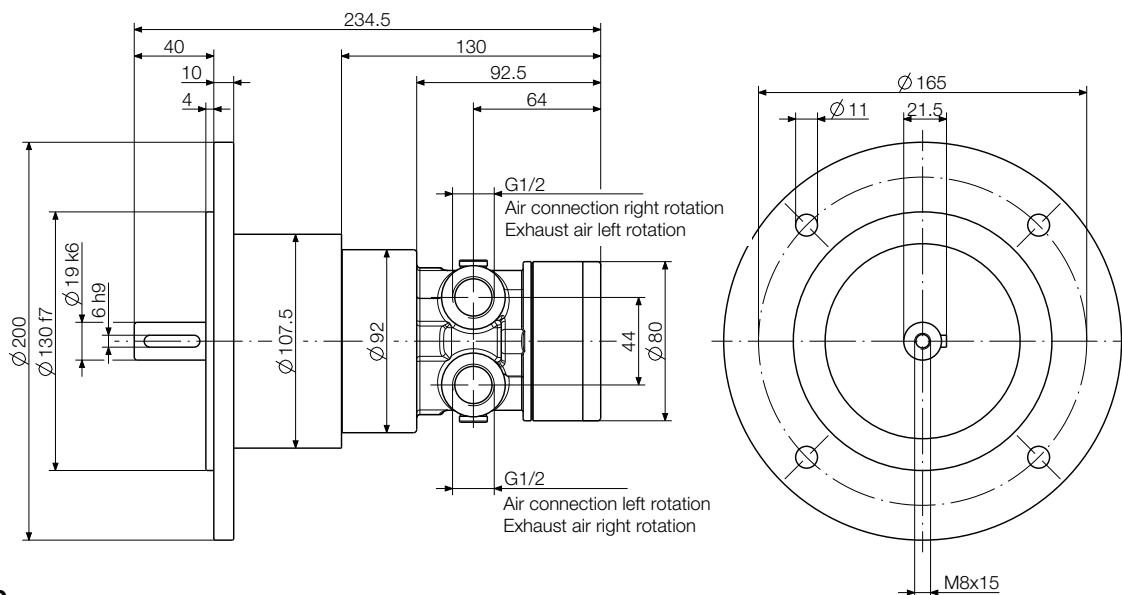
P1V-A160A0900

IEC71 Flange mounting



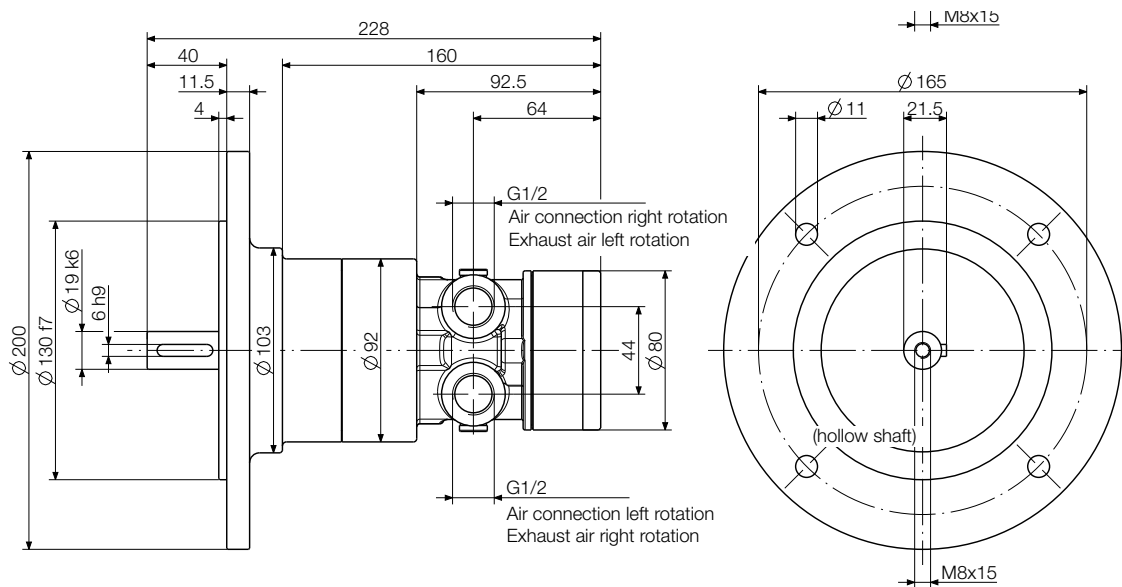
P1V-A160D0300

IEC80 Flange mounting



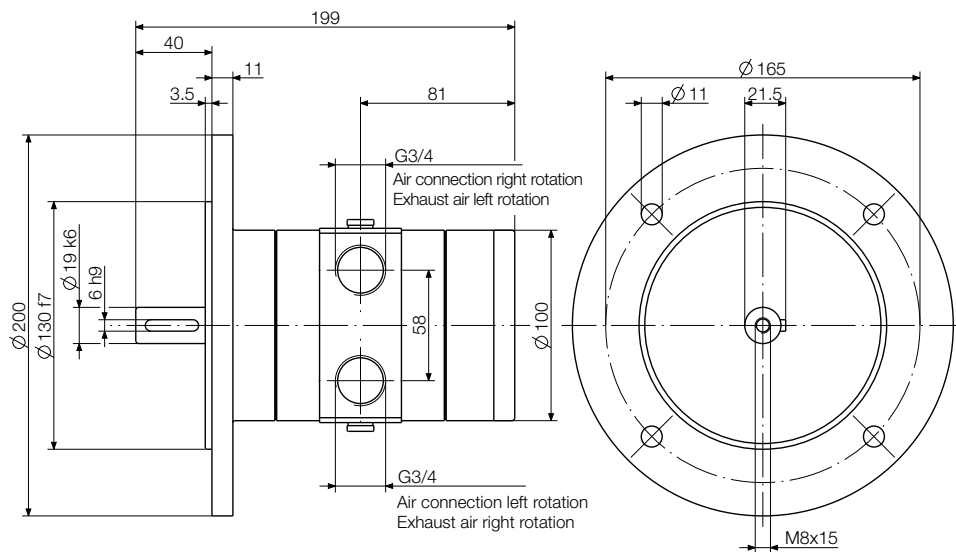
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IEC80 Flange mounting

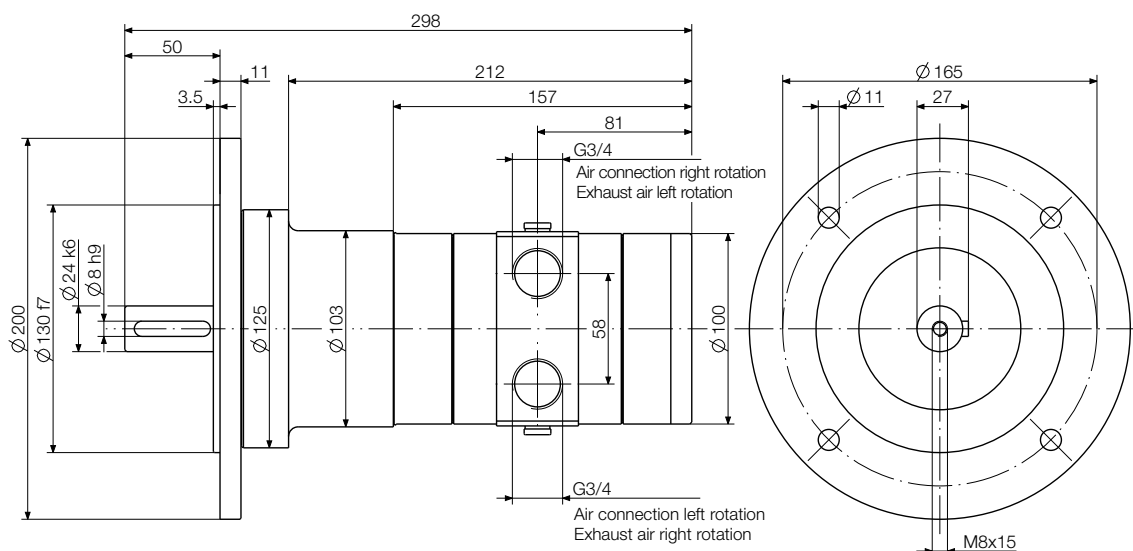


Dimensions in mm

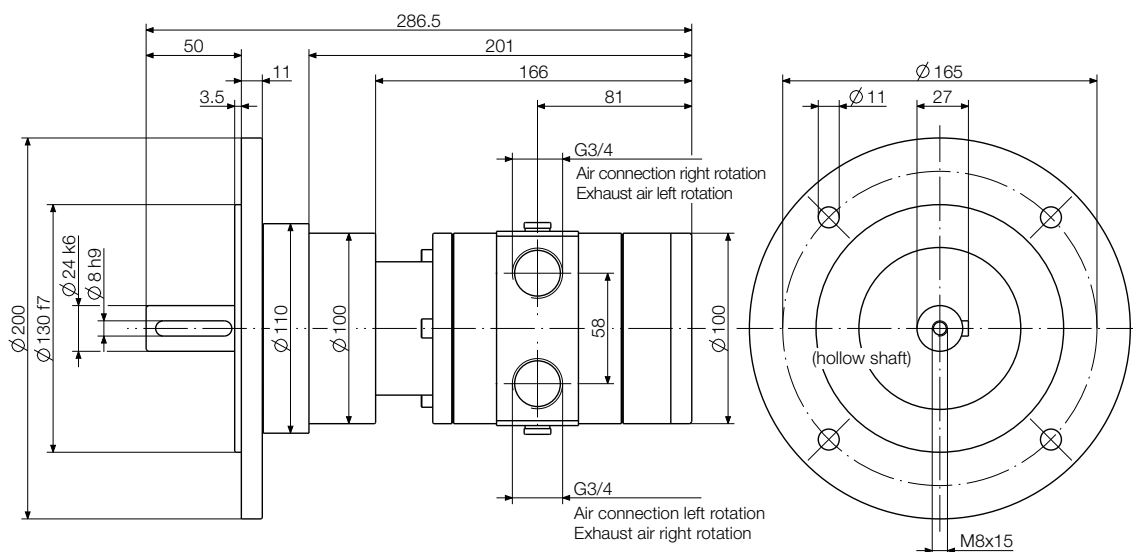
P1V-A320A0700
IEC80 Flange mounting



P1V-A320D0300
IEC90 Flange mounting



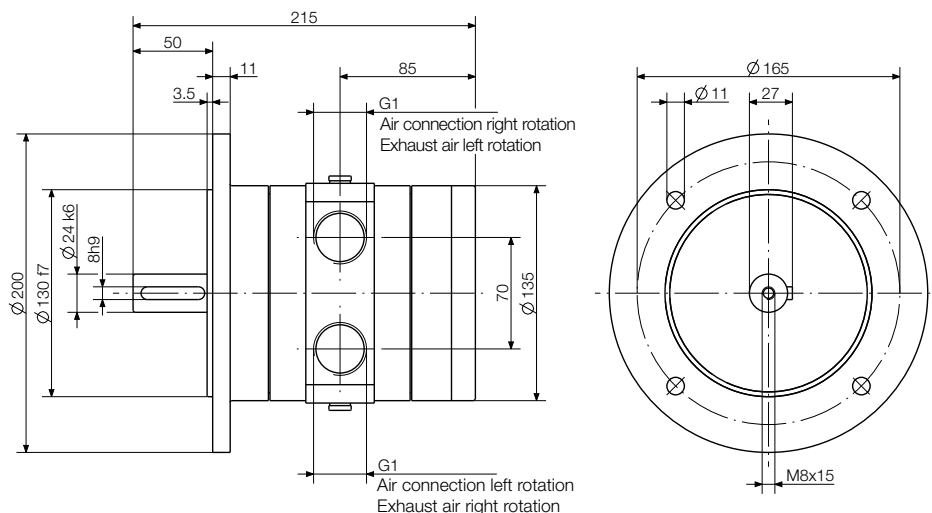
P1V-A320B0140
IEC90 Flange mounting



Dimensions in mm

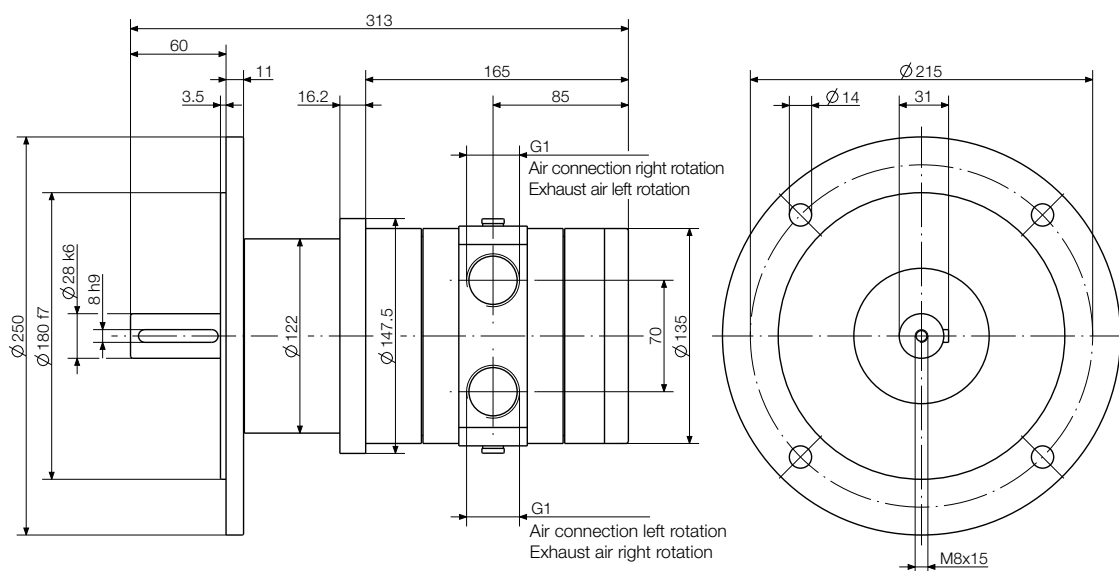
P1V-A500A0600

IEC90 Flange mounting



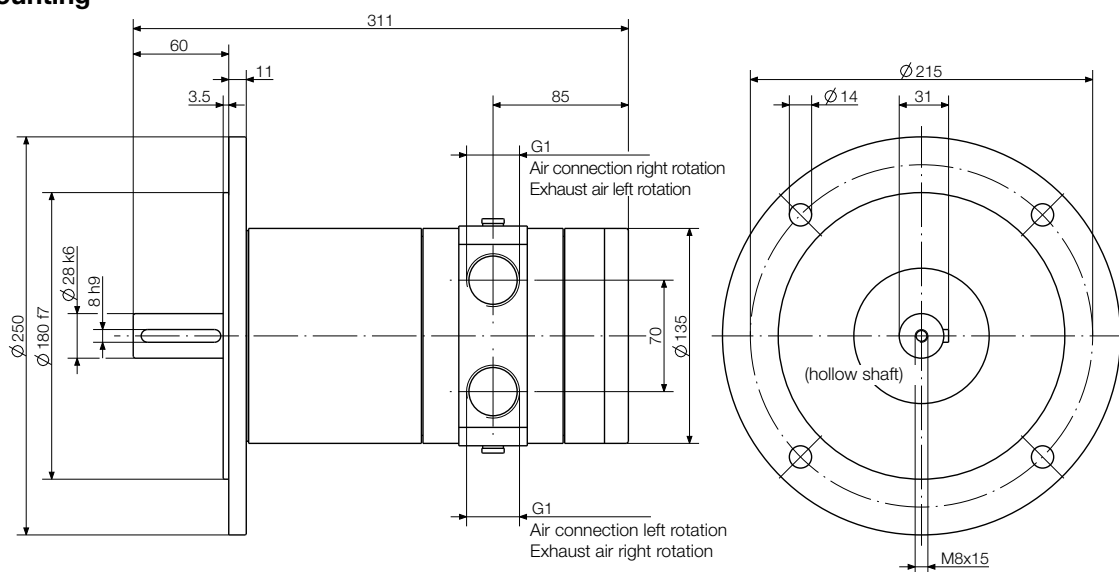
P1V-A500D0300

IEC100 Flange mounting



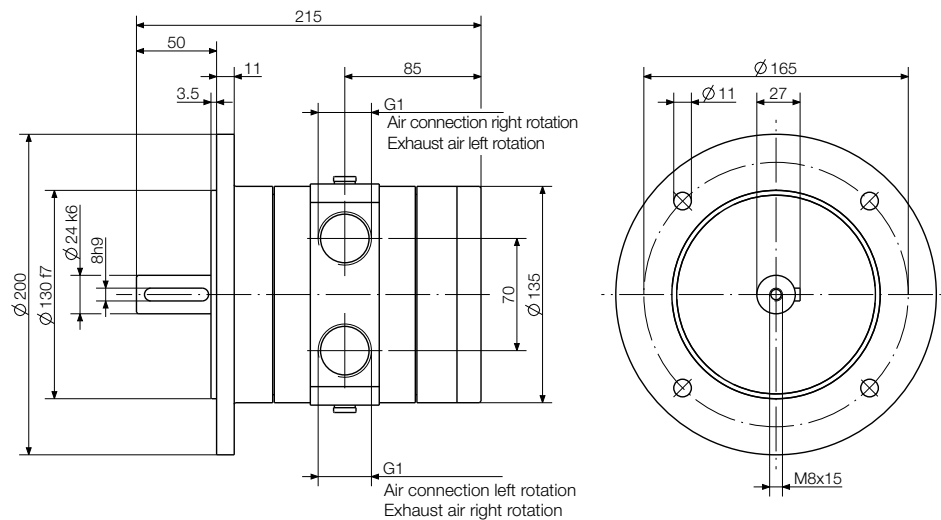
P1V-A500B0145

IEC100 Flange mounting

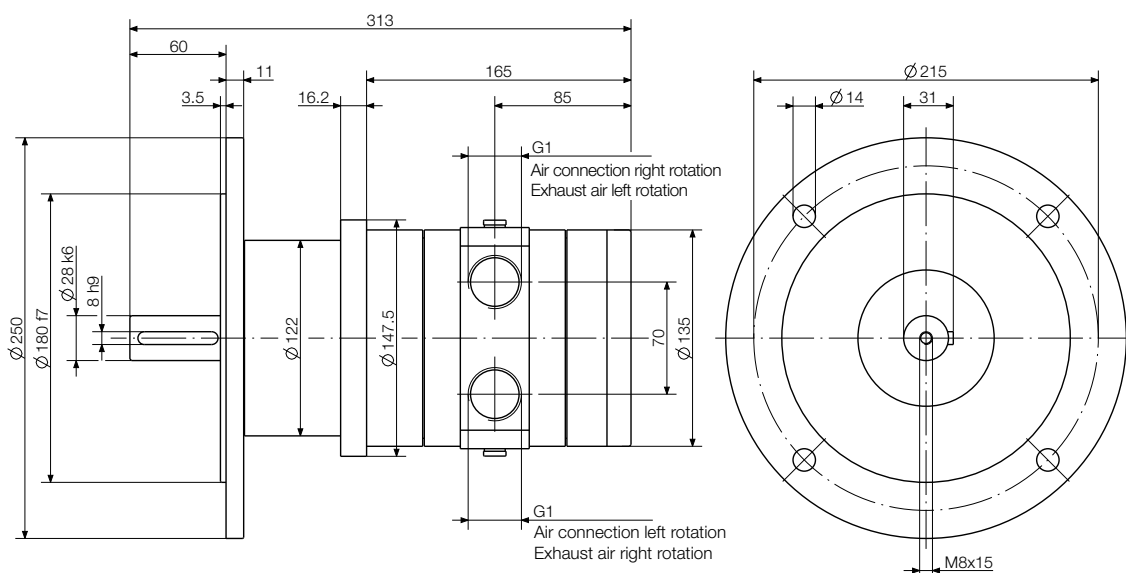


Dimensions in mm

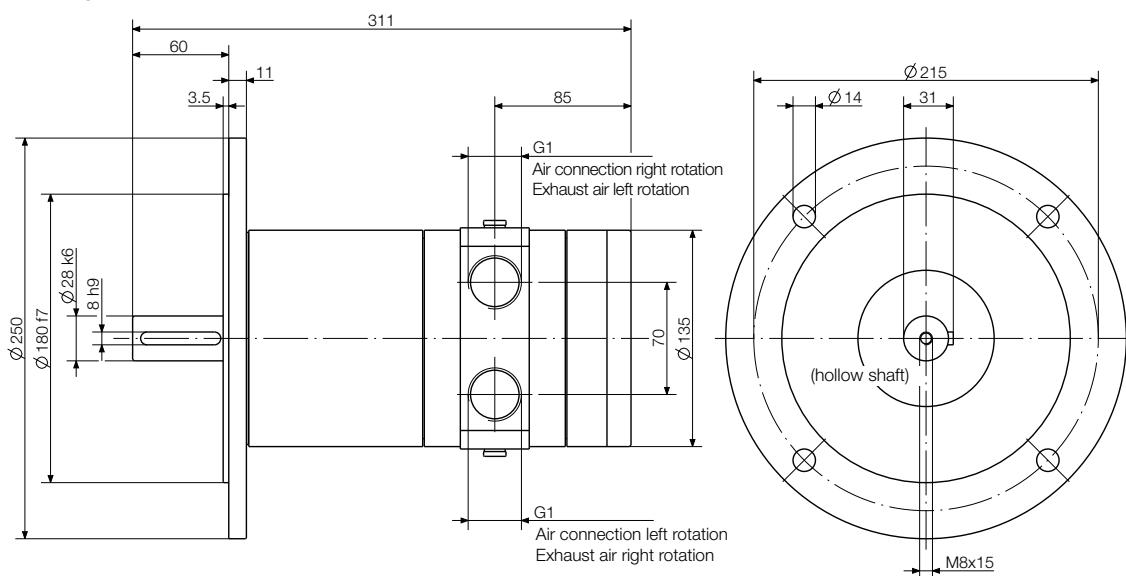
P1V-A600A0700
IEC90 Flange mounting



P1V-A600D0350
IEC100 Flange mounting

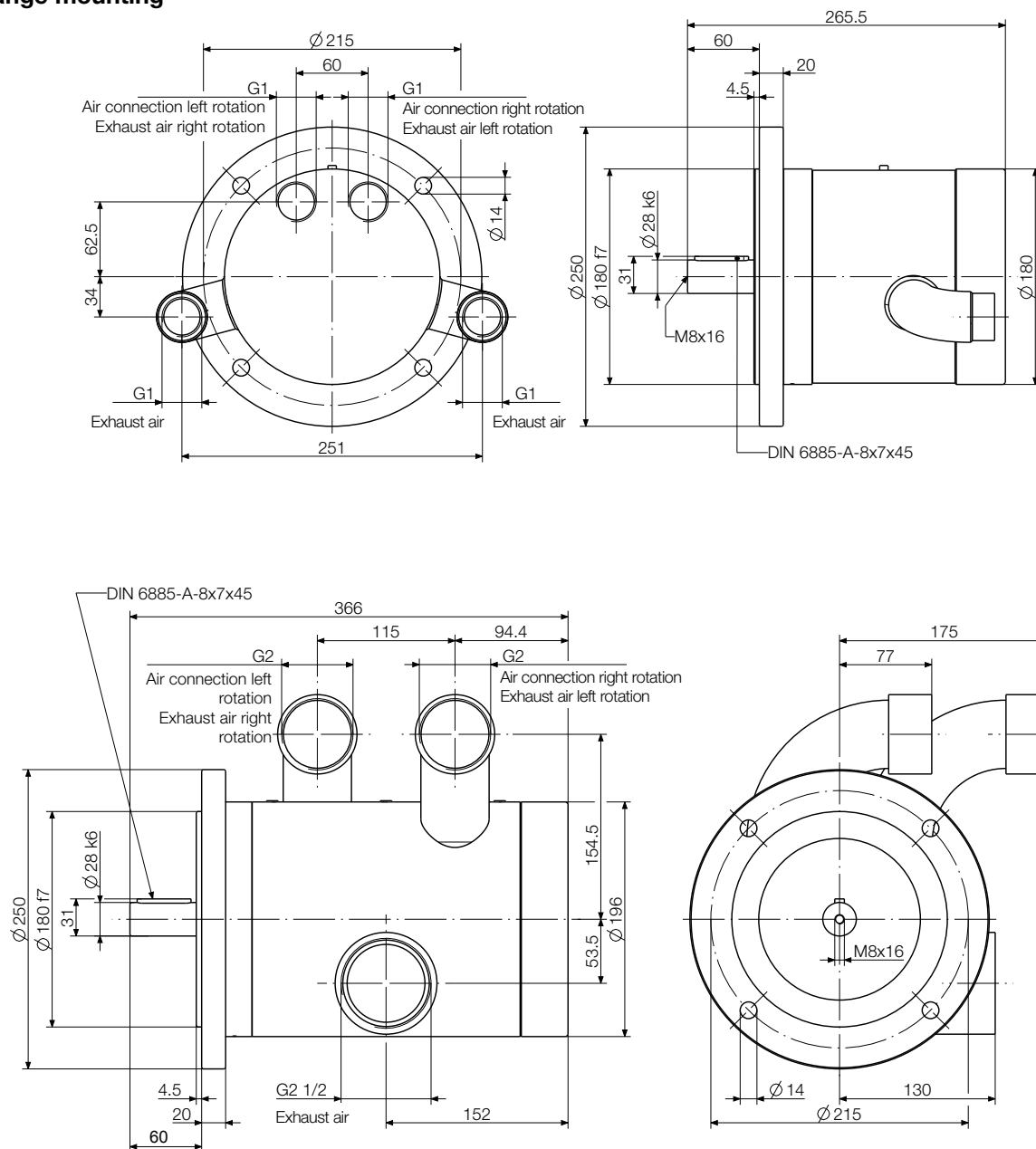


P1V-A600B0160
IEC100 Flange mounting



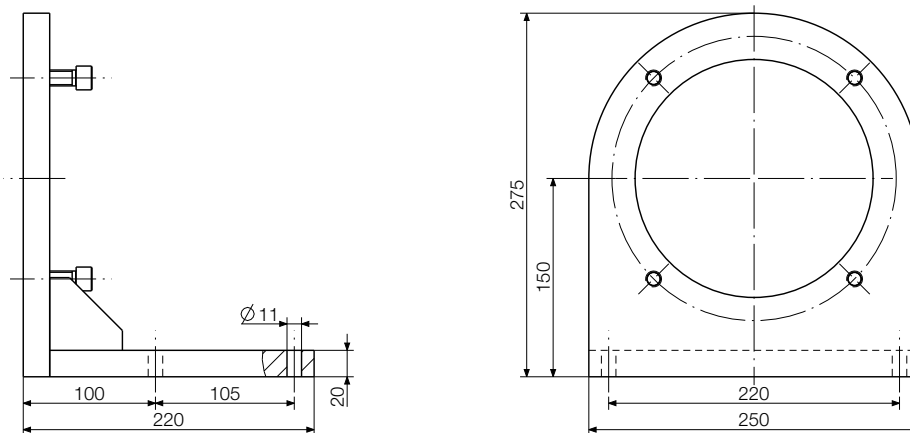
Dimensions in mm

P1V-A900A0600
IEC112A Flange mounting



P1V-AF1 Foot bracket

Made in steel, kit with mounting screws



Dimensions in mm