ENGINEERING
TOMORROW

Technical Information

Orbital Motors
Type OMP, OMR and OMH

powersolutions.danfoss.com

Revision history

Table of revisions

Date	Changed	Rev
March 2016	Engineering Tomorrow	0401
August 2015	Dimensions updated	0400
November 2014	Converted to Danfoss layout - DITA CMS	DA
November 2012	Planetary Gears deleted	CF
September 2011	Typo	CE
September 2010	New back cover	CD
March 2010	Japan location	CC
June 2007	Major revision with new lit-number (minus OMEW, will be prepared separately	CA
March 2006	Small updates	B

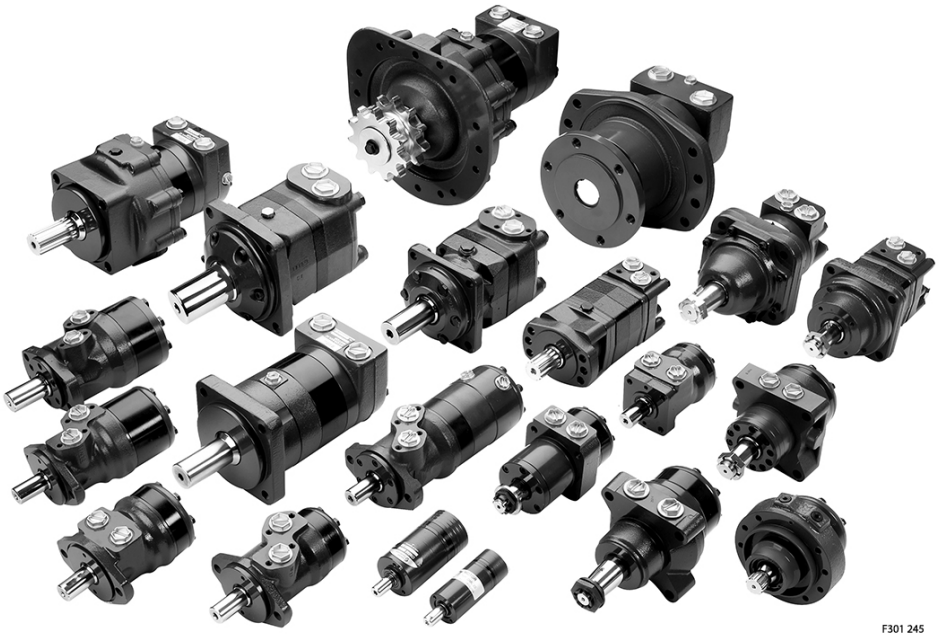
Contents

Contents

Contents

A wide range of Orbital Motors

Characteristic, features and application areas of Orbital Motors



Danfoss is a world leader within production of low speed orbital motors with high torque. We can offer more than 3,000 different orbital motors, categorised in types, variants and sizes (including different shaft versions).

The motors vary in size (rated displacement) from 8 cm^3 [0.50 in^3] to 800 cm^3 [48.9 in^3] per revolution.

Speeds range up to approximate 2,500 min^{-1} (rpm) for the smallest type and up to approximate 600 min^{-1} (rpm) for the largest type.

Maximum operating torques vary from 13 N•m [115 lbf•in] to 2,700 N•m [24,000 lbf•in] (peak) and maximum outputs are from 2.0 kW [2.7 hp] to 70 kW [95 hp].

Characteristic features of Danfoss Orbital Motors

- Smooth running over the entire speed range
- Constant operating torque over a wide speed range
- High starting torque
- High return pressure without the use of drain line (High pressure shaft seal)
- High efficiency
- Long life under extreme operating conditions
- Robust and compact design
- High radial and axial bearing capacity
- For applications in both open and closed loop hydraulic systems
- Suitable for a wide variety of hydraulics fluids

Technical features of Danfoss Orbital Motor

The programme is characterised by technical features appealing to a large number of applications and a part of the programme is characterised by motors that can be adapted to a given application. Adaptions comprise the following variants among others:

- Motors with corrosion resistant parts
- Wheel motors with recessed mounting flange

A wide range of Orbital Motors

- OMP, OMR- motors with needle bearing
- OMR motor in low leakage version
- OMR motors in a super low leakage version
- Short motors without bearings
- Ultra short motors
- Motors with integrated positive holding brake
- Motors with integrated negative holding brake
- Motors with integrated flushing valve
- Motors with speed sensor
- Motors with tacho connection
- All motors are available with black finish paint

The Danfoss Orbital Motors are used in the following application areas:

- Construction equipment
- Agricultural equipment
- Material handling & Lifting equipment
- Forestry equipment
- Lawn and turf equipment
- Special purpose
- Machine tools and stationary equipment
- Marine equipment

Survey of literature with technical data on Danfoss Orbital Motors

Detailed data on all Danfoss Orbital Motors can be found in our motor catalogue, which is divided into more individual subcatalogues:

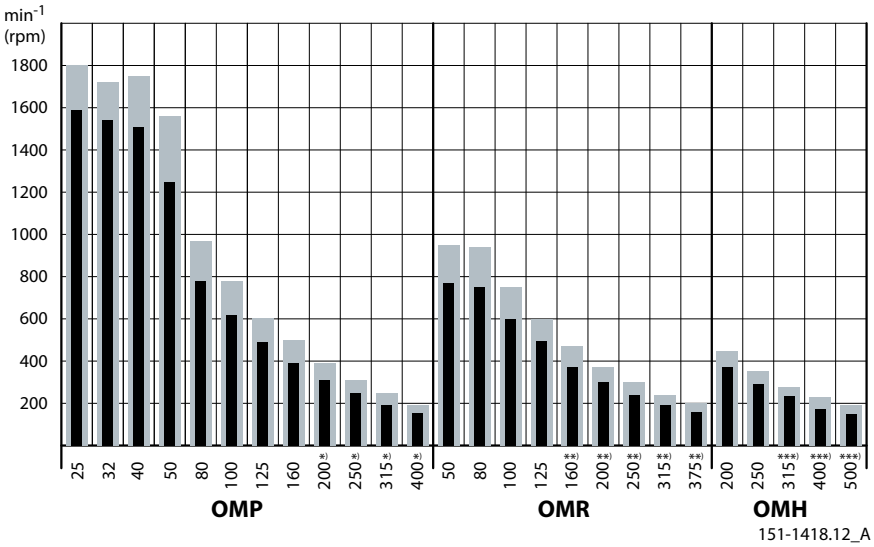
- General information on Danfoss Orbital Motors: function, use, selection of orbital motor, hydraulic systems, etc.
- Technical data on small motors: OML and OMM
- Technical data on medium sized motors: OMP, OMR, OMH
- Technical data on medium sized motors: DH and DS
- Technical data on medium sized motors: OMEW
- Technical data on medium sized motors: VMP
- Technical data on medium sized motors: VMR
- Technical data on large motors: OMS, OMT and OMV
- Technical data on large motors: TMK
- Technical data on large motors: TMT
- Technical data on large motors: TMTHW
- Technical data on large motors: TMVW

A general survey brochure on Danfoss Orbital Motors gives a quick motor reference based on power, torque, speed and capabilities.

A wide range of Orbital Motors

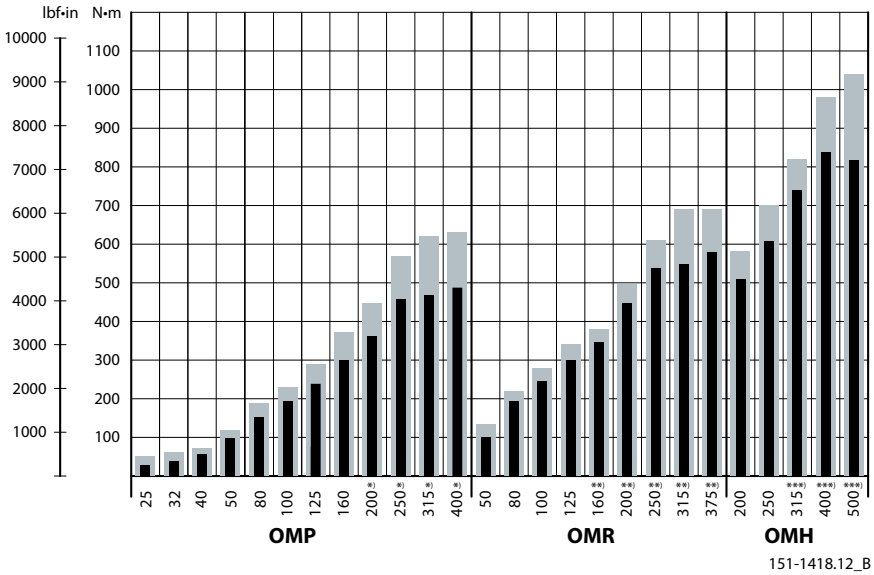
Speed, torque and output

Maximum speed



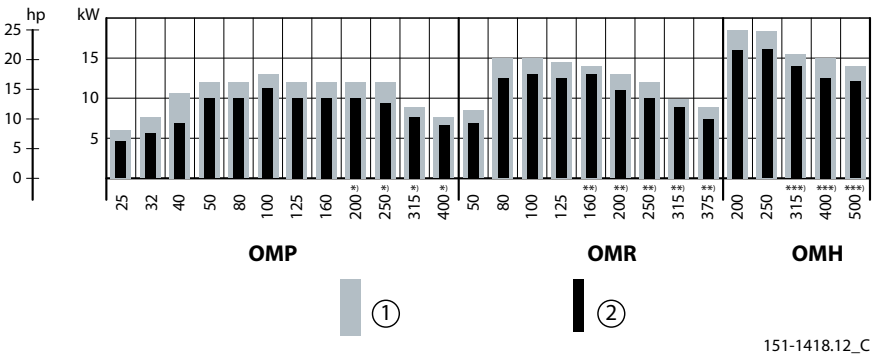
151-1418.12_A

Maximum torque



151-1418.12_B

Maximum output



151-1418.12_C

A wide range of Orbital Motors

1. Intermittend values

2. Continuous values

* Cylindrical 32 mm or 1 1/4 in shaft

** Cylindrical 32 mm, 35 mm, 1 1/4 in or 1 1/4 in tapered shaft

*** Cylindrical 35 mm, 1 1/4 in splined or 35 mm tapered shaft

The bar diagrams above are useful for a quick selection of relevant motor size for the application. The final motor size can be determined by using the function diagram for each motor size.

- OMP and OMPW: see *OMP function diagrams*
- OMR and OMRW: see *OMR function diagrams* on page 55
- OMH: see *OMH function diagrams* on page 85

The function diagrams are based on actual tests on a representative number of motors from our production. The diagrams apply to a return pressure between 5 and 10 bar. [75 and 150 psi] when using mineral based hydraulic oil with a viscosity of 35 mm^2/s [165 SUS] and a temperature of 50°C [120°F]. For further explanation concerning how to read and use the function diagrams, please consult the paragraph "Selection of motor size" in the technical information *General Orbital Motors* 520L0232.

OMP versions and code numbers

This section shows the different versions/configuration codes and the ordering numbers.

- Section *OMP technical data* on page 14, specify the technical data for OMP for each shaft type.
- In section *OMP function diagrams*, the diagram for each motor size is shown.
- See *OMP dimensions* on page 33 for outer main dimensions for the different OMP motor types.

OMP versions and code numbers

OMP standard motors

Mounting flange: 2 holde oval flange (A2)

Spigot diamer	**Ø82.5 mm [3.25 in]**							
Bolt circle diameter	**Ø106.4 mm [4.20 in]**							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	-	-	Yes	-	OMP	***A1***
Cyl. Ø25 mm	G 1/2	Side port	G 1/4	-	Yes	-	OMP	***A2***
Cyl. Ø25 mm	G 1/2	End port	G 1/4	Yes	-	Yes	OMP	***A3***
Cyl. 1 in	G 1/2	Side port	-	-	Yes	-	OMP	***A4***
Cyl. 1 in	G 1/2	Side port	G 1/4	-	Yes	-	OMP	***A5***
Cyl. 1 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMP	***A6***
Splined 1 in	G 1/2	Side port	-	-	Yes	-	OMP	***A7***
Splined 1 in	G 1/2	Side port	G 1/4	-	Yes	-	OMP	***A8***

Code numbers

Conf. code	**Displacement**											
	25	**32**	**40**	**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**
A1	151-0340	151-0341	151-0342	151-0310	151-0311	151-0312	151-0313	151-0314	151-0315	151-0316	151-0317	151-0318
A2	151-0640	151-0641	151-0652	151-0610	151-0611	151-0612	151-0613	151-0614	151-0615	151-0616	151-0617	151-0618
A3	-	-	-	151-5191	151-5192	151-5193	151-5194	151-5195	151-5196	151-5197	151-5198	151-5199
A4	-	-	11090903	151-0300	151-0301	151-0302	151-0303	151-0304	151-0305	151-0306	151-0307	151-0308
A5	-	-	-	151-0600	151-0601	151-0602	151-0603	151-0604	151-0605	151-0606	151-0607	151-0608
A6	151-7080	151-7081	151-7082	151-7041	151-7042	151-7043	151-7044*	151-7045	151-7046	-	151-7048	151-7049
A7	-	-	-	151-0330	151-0331	151-0332	151-0333	151-0334	151-0335	151-0336	151-0337	151-0338
A8	-	-	-	151-0630	151-0631	151-0632	151-0633	151-0634	151-0635	151-0636	151-0637	151-0638

* Motor painted black

Mounting flange : 4 hole oval flange (A4)

Spigot diamer	**Ø82.5 mm [3.25 in]**							
Bolt circle diameter	**Ø106.4 mm [4.20 in]**							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø32 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMP	***B1***

OMP versions and code numbers

Code numbers

Conf. code	Displacement											
	25	32	40	50	80	100	125	160	200	250	315	400
B1	-	-	-	-	-	-	151-5004	151-5005	151-5006	151-5007	151-5008	151-5009

Mounting flange: Square flange (C)

Spigot diamer	Ø44.4 mm [1.75 in]							
Bolt circle diameter	Ø82.5 mm [3.25 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	End port	G 1/4	Yes	-	Yes	OMP	***C1***
Cyl. 1 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMP	***C2***
Cyl. 1 in	1/2-14 NPTF	Side port	7/16-20 UNF	Yes	-	Yes	OMP	***C3***

Code numbers

Conf. code	Displacement											
	25	32	40	50	80	100	125	160	200	250	315	400
C1	-	-	-	151-5211	151-5212	-	-	-	151-5216	-	-	-
C2	-	-	11130216	151-7061	151-7062	151-7063	-	151-7065	151-7066	151-7067	151-7068	151-7069
C3	-	-	-	-	-	151-7023	-	-	151-7026	-	151-7028	-

Mounting flange: Wheel

Spigot diamer	Ø80 mm [3.15 in]							
Bolt circle diameter	Ø103 mm [4.06 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	Yes	Yes	-	Yes	OMPW	***D1***

Code numbers

Conf. code	Displacement											
	25	32	40	50	80	100	125	160	200	250	315	400
D1	-	-	11036135	151-7101	151-7102	151-7103	151-7104	151-7105	151-7106	151-7107	151-7108	151-7109

OMP motors with corrosion resistant parts

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	G1/4	Yes	-	Yes	OMP C	***E1***

OMP versions and code numbers

Code numbers

Conf. code	Displacement											
	25	32	40	50	80	100	125	160	200	250	315	400
E1	151-5376	-	-	151-1208	151-1209	151-1210	-	151-1211	151-1212	151-1213	151-1214	-

OMP motors with needle bearings

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	Main port size	Port style	Drain port size	Standard shaft seal	High pressure shaft seal	Check valve	Main type designation	Conf. code
Cyl. Ø25 mm	G 1/2	Side port	G1/4	Yes	-	Yes	OMP N	***F1***

Code numbers

Conf. code	Displacement											
	25	32	40	50	80	100	125	160	200	250	315	400
F1	-	-	11071283	151-5311	-	151-5313	-	-	151-5316	-	151-5318	-

OMPW motors with needle bearings

Mounting flange: Wheel

Spigot diamer	Ø80 mm [3.15 in]							
Bolt circle diameter	Ø103 mm [4.06 in]							
Shaft	Main port size	Port style	Drain port size	Standard shaft seal	High pressure shaft seal	Check valve	Main type designation	Conf. code
Tap. Ø28.5 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMPW N	***F2***

Code numbers

Conf. code	Displacement											
	25	32	40	50	80	100	125	160	200	250	315	400
F2	-	-	151-5324	151-5301	151-5302	151-5303	151-5304	151-5305	151-5306	151-5307	151-5308	151-5309

OMP motors with free running gerotor

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	Main port size	Port style	Drain port size	Standard shaft seal	High pressure shaft seal	Check valve	Main type designation	Conf. code
Cyl. Ø25 mm	G 1/2	Side port	G1/4	Yes	-	-	OMP	***G1***

OMP versions and code numbers

Code numbers

Conf. code	Displacement											
	25	**32**	**40**	**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**
G1	-	-	-	-	-	151-0622	151-0623	151-0624	151-0625	-	151-0627	-

Features available (options)

Low leakage (low speed valve)

Speed sensor

Viton shaft seal

Reverse rotation

Painted

OMP technical data

OMP with 25 mm and 1 in cylindrical shaft

OMP 25 cm³ - 100 cm³

Type			**OMP**	**OMP**	**OMP**	**OMP**	**OMP**	**OMP**
Motor size			**25**	**32**	**40**	**50**	**80**	**100**
Geometric displacement	cm^3 [inch]		25.0 [1.53]	32.0 [1.96]	40.0 [2.45]	48.6 [2.97]	77.8 [4.76]	97.3 [5.95]
Max. speed	min^{-1}	cont.	1600	1560	1500	1230	770	615
	[rpm]	int.[1]	1800	1720	1750	1540	960	770
Max. torque	N•m [lbf•in]	cont.	33 [290]	43 [380]	52 [460]	93 [820]	150 [1330]	190 [1680]
		int.[1]	47 [420]	61 [540]	74 [660]	120 [1060]	190 [1680]	230 [2040]
Max. output	kW [hp]	cont.	4.5 [6.0	5.8 [7.8]	7.0 [9.4]	10.0 [13.4]	10.0 [13.4]	11.0 [14.8]
		int.[1]	6.1 [8.2]	7.8 [10.5]	10.6 [14.2]	12.0 [16.1]	12.0 [16.1]	13.0 [17.4]
Max. pressure drop	bar [psi]	cont.	100 [1450]	100 [1450]	100 [1450]	140 [2030]	140 [2030]	140 [2030]
		int.[1]	140 [2030]	140 [2030]	140 [2030]	175 [2540]	175 [2540]	175 [2540]
		peak[2]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. oil flow	l/min [US gal/min]	cont.	40 [10.6]	50 [13.2]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
		int.[1]	45 [11.9]	55 [14.5]	70 [18.5]	75 [19.8]	75 [19.8]	75 [19.8]
Max. starting pressure with unloaded shaft	bar [psi]	standard	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]
		free running gerotor	-	-	-	-	-	2 [29]
Min starting torque	at max. press drop cont. N•m [lbf•in]		30 [270]	40 [350]	45 [400]	80 [710]	135 [1200]	170 [1510]
	at max. press.drop int.[1] N•m [lbf•in]		40 [350]	55 [490]	63 [560]	100 [890]	170 [1510]	210 [1860]

[1] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2] Peak load: the permissible values may occur for max. 1% of every minute.

OMP 125 cm³ - 400 cm³

Type			**OMP**	**OMP**	**OMP**	**OMP**	**OMP**	**OMP**
Motor size			**125**	**160**	**200**	**250**	**315**	**400**
Geometric displacement	cm^3 [inch]		125.0 [7.65]	155.7 [9.53]	194.6 [11.91]	242.3 [14.83]	306.1 [18.73]	389.2 [23.82]
Max. speed	min^{-1} [rpm]	cont.	480	385	310	250	195	155
		int[1]	600	480	385	310	245	190
Max. torque	N•m [lbf•in]	cont.	240 [2120]	300 [2660]	300 [2660]	300 [2660]	300 [2660]	300 [2660]
		int.[1]	290 [2570]	370 [3280]	380 [3360]	410 [3630]	390 [3450]	420 [3720]

OMP technical data

OMP 125 cm³ - 400 cm³ (continued)

Type			OMP	OMP	OMP	OMP	OMP	OMP
Motor size			**125**	**160**	**200**	**250**	**315**	**400**
Max. output	kW [hp]	cont.	10 [13.4]	10 [13.4]	8.0 [10.7]	6.0 [8.1]	5.0 [6.7]	4.0 [5.4]
		int.[1)]	12.0 [16.1]	12.0 [16.1]	11.0 [14.8]	9.0 [12.1]	7.0 [9.4]	6.0 [8.1]
Max. pressure drop	bar [psi]	cont.	140 [2030]	140 [2030]	115 [1670]	90 [1310]	75 [1090]	60 [870]
		int[1)]	175 [2540]	175 [2540]	150 [2180]	125 [1810]	100 [1450]	80 [1160]
		peak[2)]	225 [3260]	225 [3260]	225 [3260]	180 [2610]	160 [2320]	130 [1890]
Max. oil flow	l/min [US gal/min]	cont.	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
		int.[1)]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Max. starting pressure with unloaded shaft	bar [psi]	standard	9 [130]	7 [100]	5 [75]	5 [75]	5 [75]	5 [75]
		free running gerotor	2 [29]	2 [29]	2 [29]	-	-	-
Min starting torque	at max. press drop cont. N•m [lbf•in]		210 [1860]	280 [2480]	270 [2390]	280 [2480]	280 [2480]	280 [2480]
	at max. press.drop int.[1)] N•m [lbf•in]		270 [2390]	350 [3100]	360 [3190]	390 [3450]	370 [3280]	400 [3540]

[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

OMP with 1 in splined and 28.5 mm tapered shaft

Type			OMP	OMP	OMP	OMP	OMP	OMP	OMP	OMP	OMP
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**
Geometric displacement	cm^3 [inch]		48.6 [2.97]	77.8 [4.76]	97.3 [5.95]	125.0 [7.65]	155.7 [9.53]	194.6 [11.91]	242.3 [14.83]	306.1 [18.73]	389.2 [23.82]
Maximum speed	min^{-1} [rpm]	cont.	1230	770	615	480	385	310	250	195	155
		int.[1)]	1540	960	770	600	480	385	310	245	190
Maximum torque	N•m [lbf•in]	cont.	93 [820]	150 [1330]	190 [1680]	240 [2120]	300 [2660]	360 [3190]	360 [3190]	360 [3190]	360 [3190]
		int.[1)]	120 [1060]	190 [1680]	230 [2040]	290 [2570]	370 [3280]	450 [3980]	460 [4070]	470 [4160]	460 [4070]
Maximum output	kW [hp]	cont.	10.0 [13.4]	10.0 [13.4]	11.0 [14.8]	10.0 [13.4]	10.0 [13.4]	10.0 [13.4]	8.0 [10.7]	6.0 [8.0]	5.0 [6.7]
		int.[1)]	12.0 [16.1]	12.0 [16.1]	13 [17.4]	12.0 [16.1]	12.0 [16.1]	12.0 [16.1]	10.5 [14.1]	7.5 [10.1]	6.0 [8.0]
Maximum pressure drop	bar [psi]	cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	105 [1520]	90 [1310]	70 [1020]
		int[1)]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	120 [1740]	90 [1310]
		peak[2)]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	180 [2610]	160 [2320]	130 [1890]

OMP technical data

Type			OMP	OMP	OMP	OMP	OMP	OMP	OMP	OMP	OMP
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**
Maximum oil flow	l/min [US gal/min]	cont.	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
		int.[1)]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Maximum starting pressure with unloaded shaft	bar [psi]		10 [145]	10 [145]	10 [145]	9 [130]	7 [100]	5 [75]	5 [75]	5 [75]	5 [75]
Minimum starting torque	at max. press drop cont. N•m [lbf•in]		80 [710]	135 [1200]	170 [1510]	210 [1860]	280 [2480]	340 [3010]	330 [2920]	340 [3010]	345 [3050]
	at max. press.drop int.[1)] N•m [lbf•in]		100 [890]	170 [1510]	210 [1860]	270 [2390]	350 [3100]	420 [3720]	440 [3890]	450 [3980]	425 [3760]

[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

OMP with 32 mm cylindrical shaft

Type			OMP	OMP	OMP	OMP	OMP	OMP	OMP	OMP	OMP
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**
Geometric displacement	cm^3 [inch]		48.6 [2.97]	77.8 [4.76]	97.3 [5.95]	125.0 [7.65]	155.7 [9.53]	194.6 [11.91]	242.3 [14.83]	306.1 [18.73]	389.2 [23.82]
Maximum speed	min^{-1} [rpm]	cont.	1230	770	615	480	385	310	250	195	155
		int.[1)]	1540	960	770	600	480	385	310	245	190
Maximum torque	N•m [lbf•in]	cont.	93 [820]	150 [1330]	190 [1680]	240 [2120]	300 [2660]	360 [3190]	460 [4070]	470 [4160]	490 [4340]
		int.[1)]	120 [1060]	190 [1680]	230 [2040]	290 [2570]	370 [3280]	450 [3980]	570 [5050]	620 [5490]	630 [580]
Maximum output	kW [hp]	cont.	10.0 [13.4]	10.0 [13.4]	11.0 [14.8]	10.0 [13.4]	10.0 [13.4]	10.0 [13.4]	9.5 [12.7]	7.5 [10.1]	6.5 [8.7]
		int.[1)]	12.0 [16.1]	12.0 [16.1]	13.0 [17.4]	12.0 [16.1]	12.0 [16.1]	12.0 [16.1]	12.0 [16.1]	9.0 [12.1]	7.5 [10.1]
Maximum pressure drop	bar [psi]	cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	120 [1740]	95 [1380]
		int.[1)]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	160 [2320]	125 [1810]
		peak[2)]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	180 [2610]
Maximum oil flow	l/min [US gal/min]	cont.	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
		int.[1)]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Maximum starting pressure with unloaded shaft	bar [psi]		10 [145]	10 [145]	10 [145]	9 [130]	7 [100]	5 [75]	5 [75]	5 [75]	5 [75]
Minimum starting torque	at max. press drop cont. N•m [lbf•in]		80 [710]	135 [1200]	170 [1510]	210 [1860]	280 [2480]	340 [3010]	420 [3720]	460 [4070]	460 [4070]
	at max. press.drop int.[1)] N•m [lbf•in]		100 [890]	170 [1510]	210 [1860]	270 [2390]	350 [3100]	420 [3720]	530 [4690]	600 [5310]	600 [5310]

[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

OMP technical data

Type			Max. inlet pressure	Max. return pressure with drain line
OMP 25 - 400	bar [psi]	cont.	175 [2540]	175 [2540]
	bar [psi]	int.[1)]	200 [2900]	200 [2900]
	bar [psi]	peak[2)]	225 [3260]	225 [3260]

[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

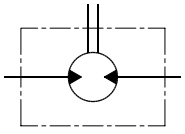
[2)] Peak load: the permissible values may occur for max. 1% of every minute.

Maximum permissible shaft seal pressure

OMP with High Pressure Shaft Seal (HPS)

OMP with HPS and without drain connection:

The shaft seal pressure equals the average of input pressure and return pressure.

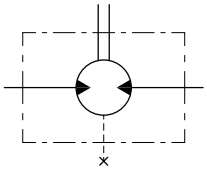


151-1743.10

$$P_{seal} = \frac{P_{in} + P_{return}}{2}$$

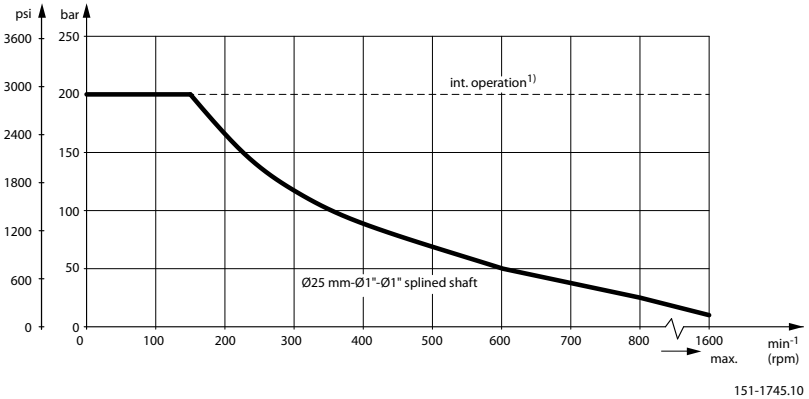
OMP with HPS and drain connection:

The shaft seal pressure equals the pressure in the drain line.



151-1855.10

Maximum permissible shaft seal pressure



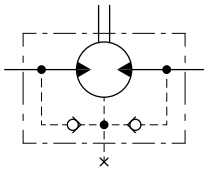
151-1745.10

OMP with Standard Shaft Seal

OMP with standard shaft seal, check valves and without use of drain connection:

The pressure on the shaft seal never exceeds the pressure in the return line

OMP technical data

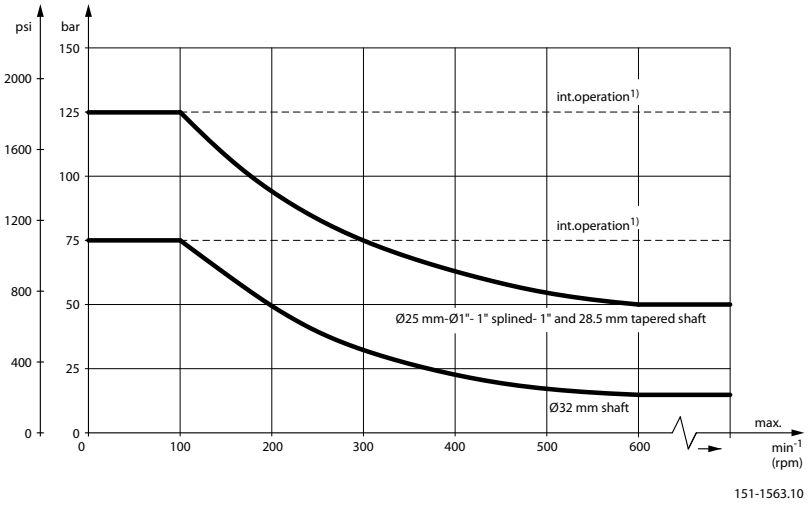


151-320.10

OMP with standard shaft seal, check valves and with drain connection:

The shaft seal pressure equals the pressure on the drain line.

Maximum return pressure without drain line or max. pressure in the drain line

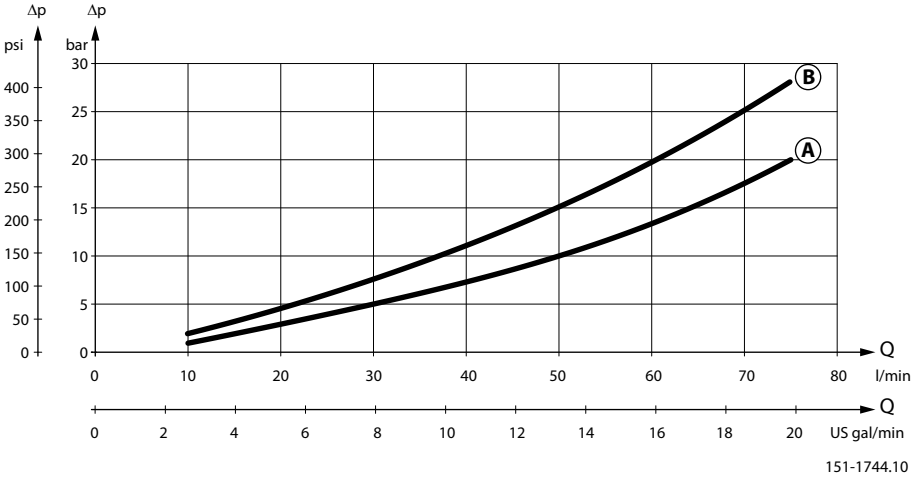


151-1563.10

1. Intermittent operation: the permissible values may occur for max. 10% of every minute.

Pressure drop in OMP motor

The curve applies to an unloaded motor shaft and an oil viscosity of 35 mm²/s [165 SUS]



151-1744.10

A: OMP 50 - 400

B: OMP 25 - 40 / OMPW

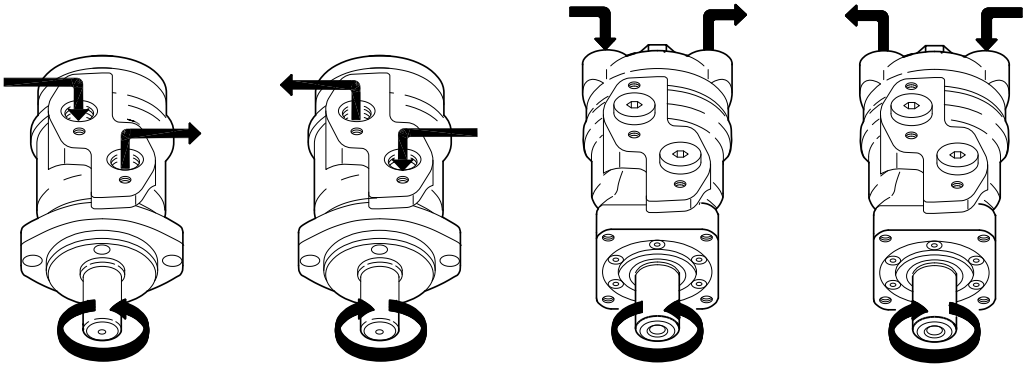
OMP technical data

Oil flow in drain line

The table shows the maximum oil flow in the drain line at a return pressure less than 5-10 bar [75-150 psi].

Pressure drop		Viscosity		Oil flow in drain line	
bar	**[psi]**	**mm^2/s**	**[SUS]**	**l/min**	**[US gal/min]**
100	[1450]	20	[100]	2.5	[0.66]
		35	[165]	1.8	[0.78]
140	[2030]	20	[100]	3.5	[0.93]
		35	[165]	2.8	[0.74]

Direction of shaft rotation



151-1836.10

Permissible shaft loads

OMP and OMR

The permissible radial shaft load (P_R) depends on:

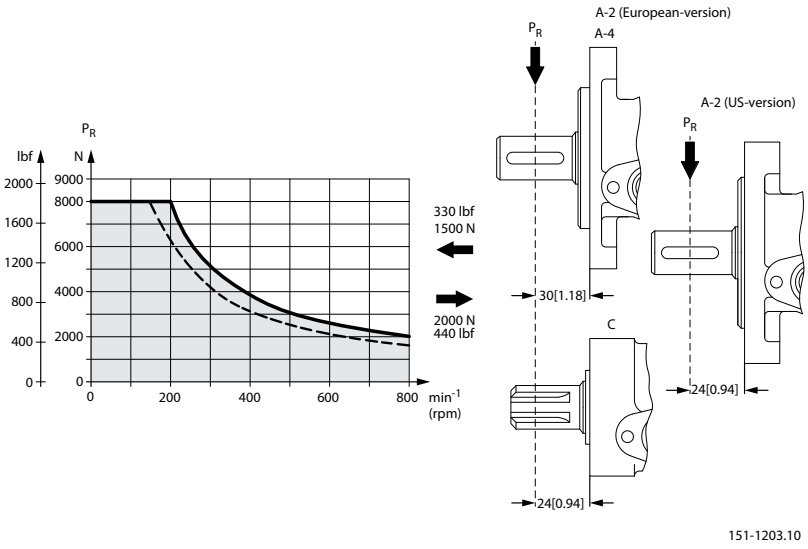
- Speed (n)
- Distance (L) from the point of load to the mounting flange
- Mounting flange version
- Shaft version

Mounting flange	**4-oval flange**** **2-hole oval flange (European version)**	**4-hole oval flange**	**Square flange**** **2-hole oval flange (US-version)**
Shaft version	**25 mm cylindrical shaft 1 in cylindrical shaft 1 in splined shaft**	**32 mm cylindrical shaft**	**25 mm cylindrical shaft**
Permissible shaft load (P_R) - l in mm	$\frac{800}{n} \cdot \frac{250000\ N^*}{95 + L}$	$\frac{800}{n} \cdot \frac{187500\ N^*}{95 + L}$	$\frac{800}{n} \cdot \frac{250000\ N^*}{101 + L}$
Permissible shaft load (P_R) - l in inch	$\frac{800}{n} \cdot \frac{2215\ lbf^*}{3.74 + L}$	$\frac{800}{n} \cdot \frac{1660\ lbf^*}{3.74 + L}$	$\frac{800}{n} \cdot \frac{2215\ lbf^*}{3.98 + L}$

** For both European and US-version

* $n \geq 200\ min^{-1}$ [rpm]; ≤ 55 mm [2.2 in]. $n < 200\ min^{-1}$ [rpm]; = > P_{Rmax} = 8000 N [1800 lbf]

OMP technical data



--------- cylindrical shaft 32 mm [1.26 in]

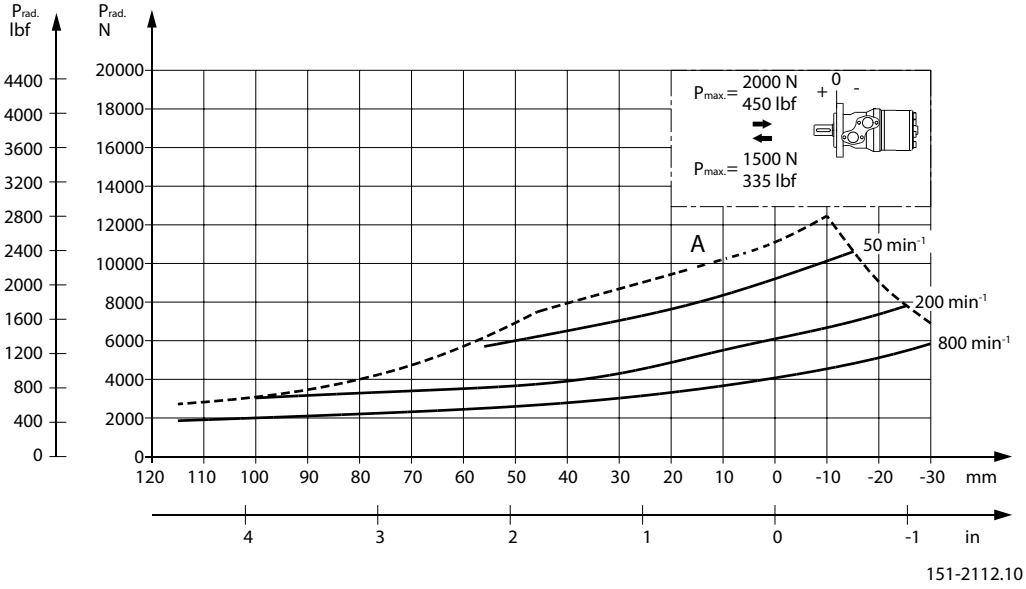
_____ other shaft versions

The curve shows the relation between P_R and n

- when l = 30 mm [1.18 in] for motors with A2 (European version) and A4 oval mounting flange
- when l = 24 mm [0.94 in] for motors with square mounting flange and A2 (US version)

For applications with special performance requirements we recommend OMP and OMR with the output shaft running in needle bearings.

OMP N



The output shaft on OMP N can be offered in needle bearings. These bearings and the recessed mounting flange allow a higher permissible radial load in comparison to OMP motors.

The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

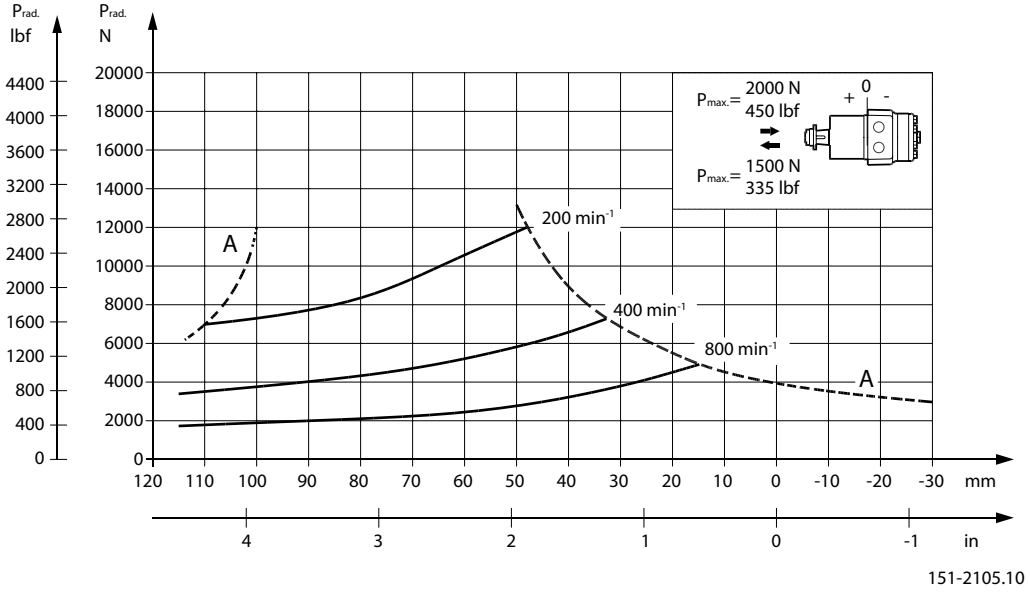
OMP technical data

Curve A indicates the max. radial shaft load. Any shaft load exceeding the values quoted in curve A will involve risk of breakage.

The other curves apply to a B10 bearing life of 2000 hours at the number of revolutions indicated by the curve letter. Mineral based hydraulic oil with a sufficient content of anti-wear additives must be used.

Bearing life calculations can be made using the explanation and formula provided in the chapter "Bearing dimensioning" in the technical information *General Orbital Motors* 520L0232.

OMPW with slide bearings



The output shaft on OMPW can be offered in slide bearings similar to the other OMP-motors. The permissible higher radial load is therefore due to the recessed mounting flange moving the point of load closer to the motor bearings.

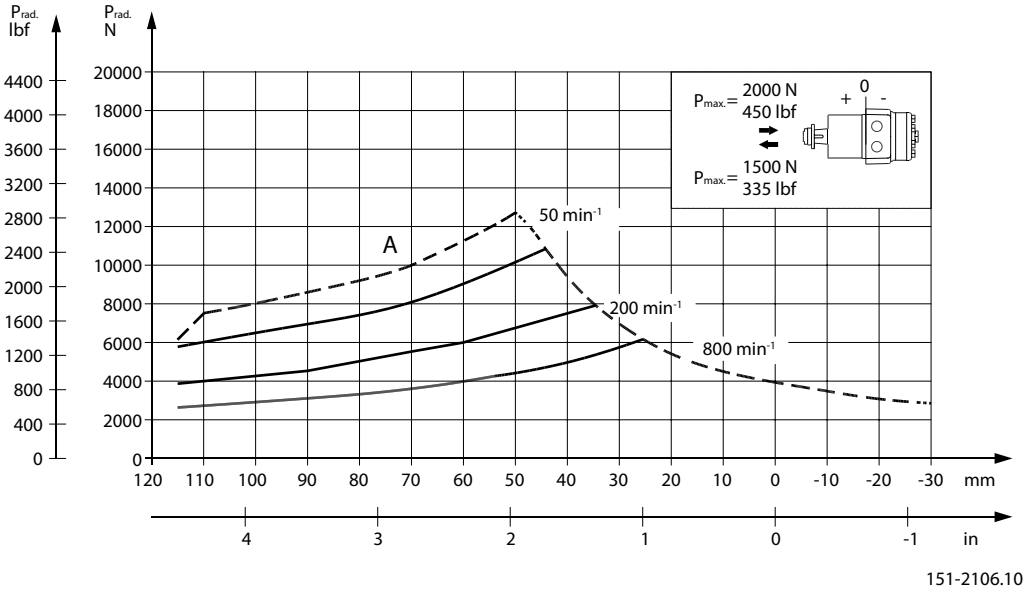
The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

The curves are not based on calculations of B10 bearing life. They represent absolute limits that must not be exceeded.

Curve A indicates the max. radial shaft load. Any shaft load exceeding the values quoted in curve A will involve risk of breakage.

OMP technical data

OMPW N with needle bearing



151-2106.10

The output shaft on OMPW N can be offered in needle bearings. These bearings and the recessed mounting flange allow a higher permissible radial load in comparison to OMP motors.

The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

Curve A indicates the max. radial shaft load. Any shaft load exceeding the values quoted in curve A will involve risk of breakage.

The other curves apply to a B10 bearing life of 2000 hours at the number of revolutions indicated by the curve letter. Mineral based hydraulic oil with a sufficient content of anti-wear additives must be used.

Bearing life calculations can be made using the explanation and formula provided in the chapter "Bearing dimensioning" in the technical information *General Orbital Motors* 520L0232.

OMP function diagrams

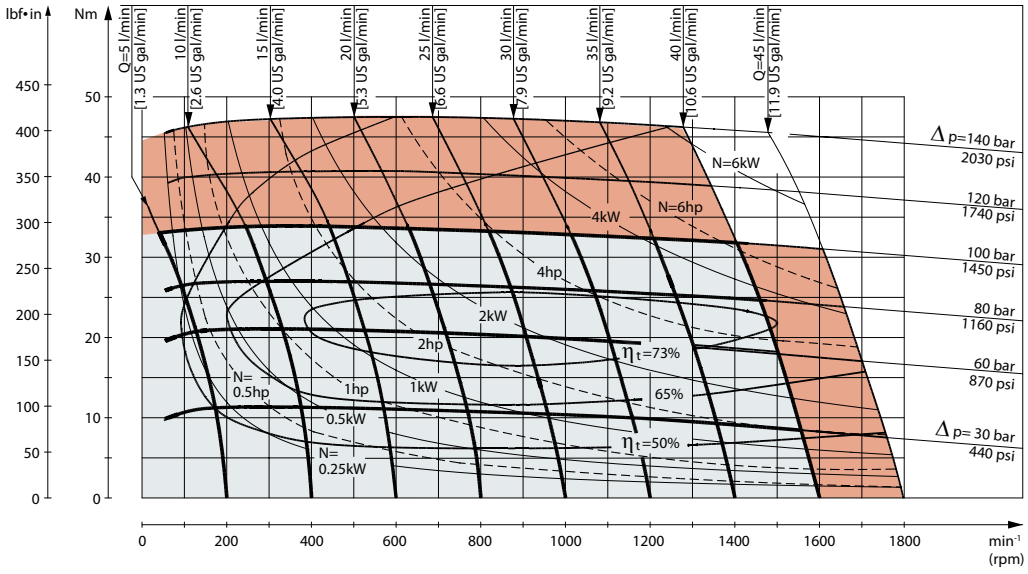
Explanation of function diagram use, basis and conditions can be found in *Speed, torque and output* on page 8.

- Continuous range
- Intermittent range (max. 10% operation every minute)

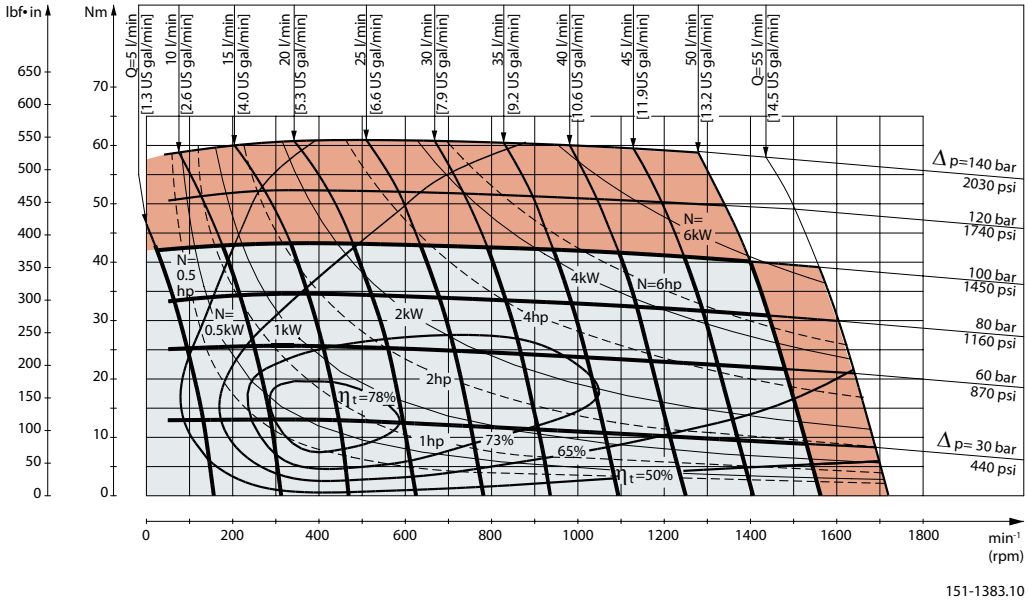
Max. permissible continuous/intermittent pressure drop for the actual shaft version can be found in *OMP technical data* on page 14.

Intermittent pressure drop and oil flow must not occur simultaneously.

OMP 25 function diagram

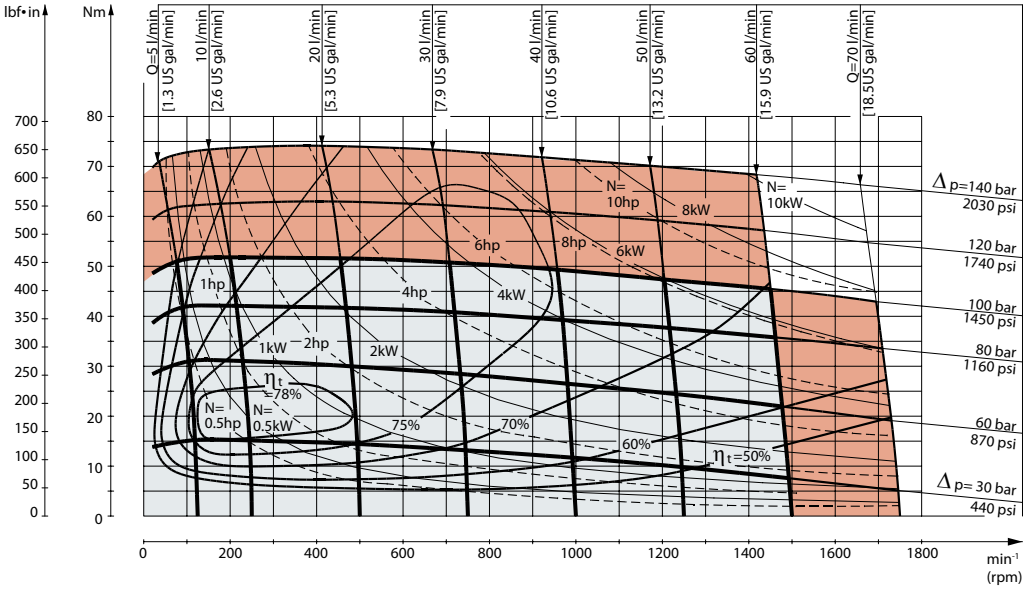


OMP 32 function diagram

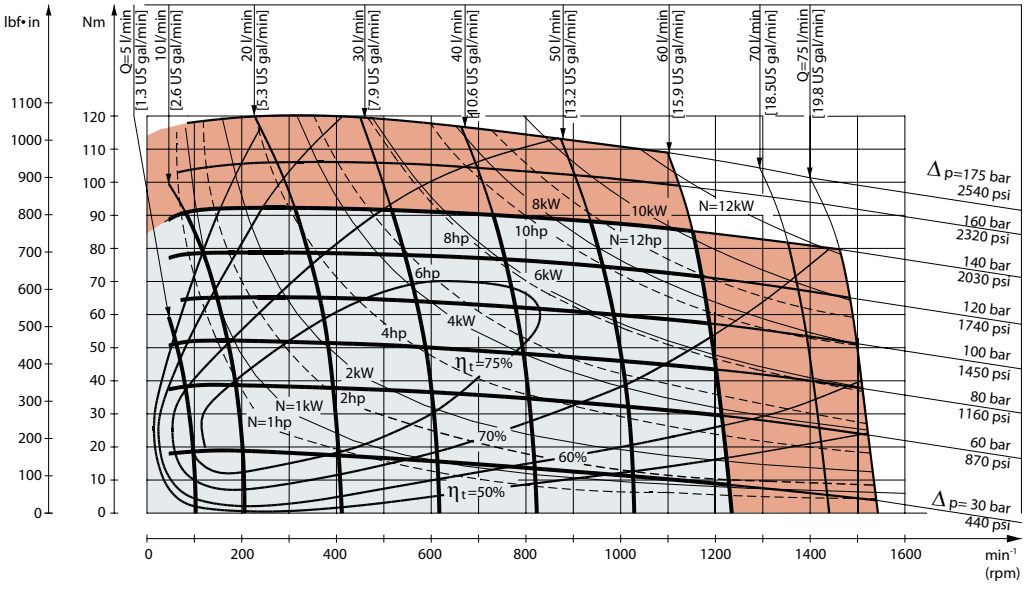


OMP function diagrams

OMP 40 function diagram

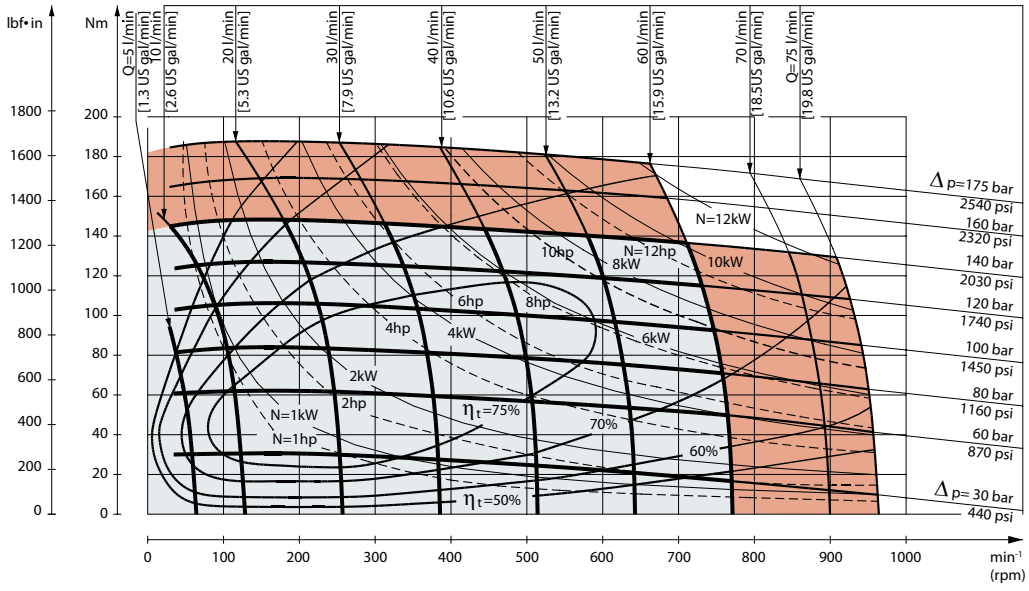


OMP 50 function diagram

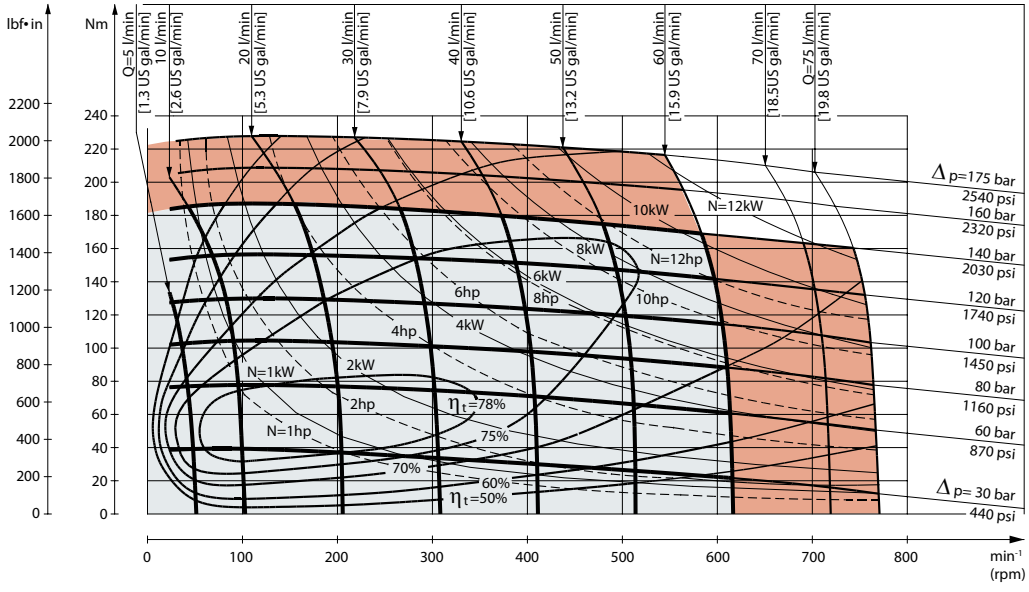


OMP function diagrams

OMP 80 function diagram

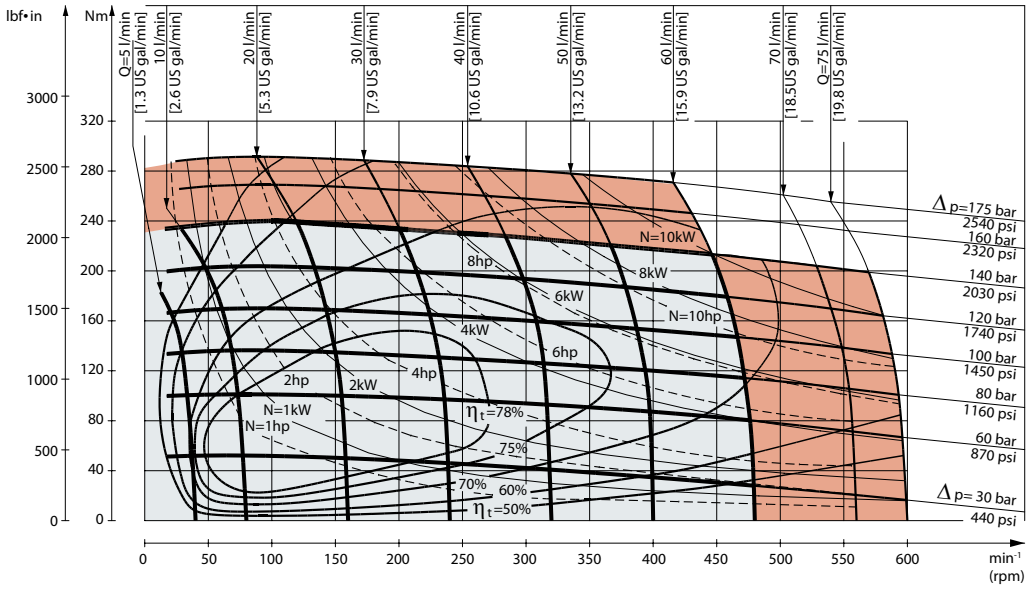


OMP 100 function diagram

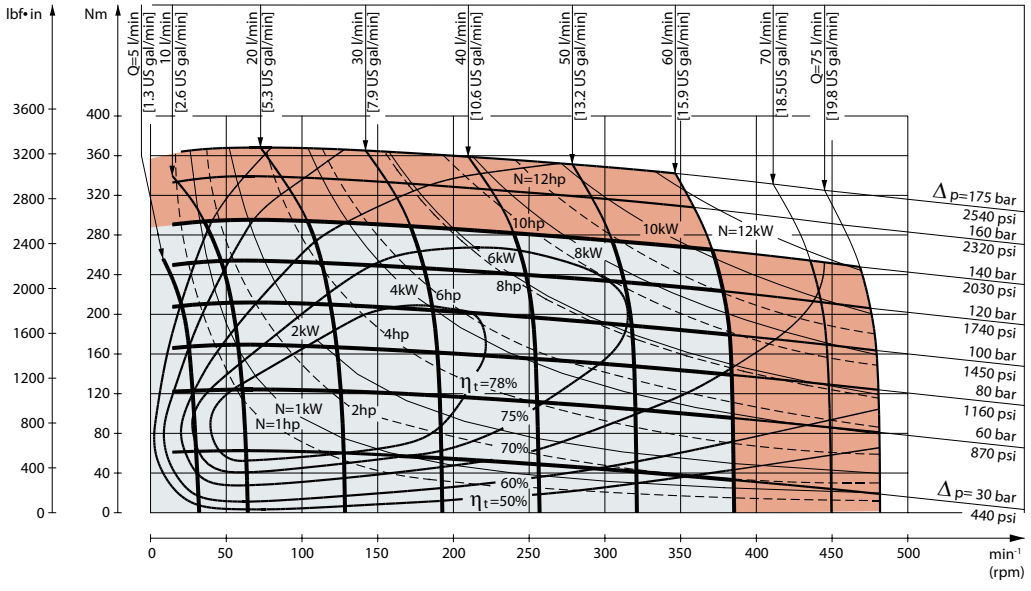


OMP function diagrams

OMP 125 function diagram

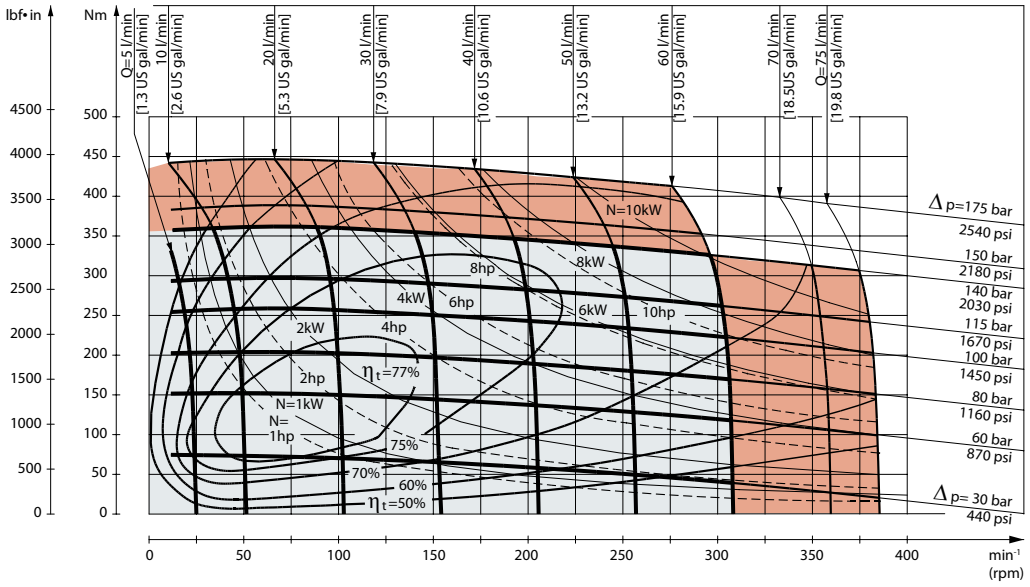


OMP 160 function diagram

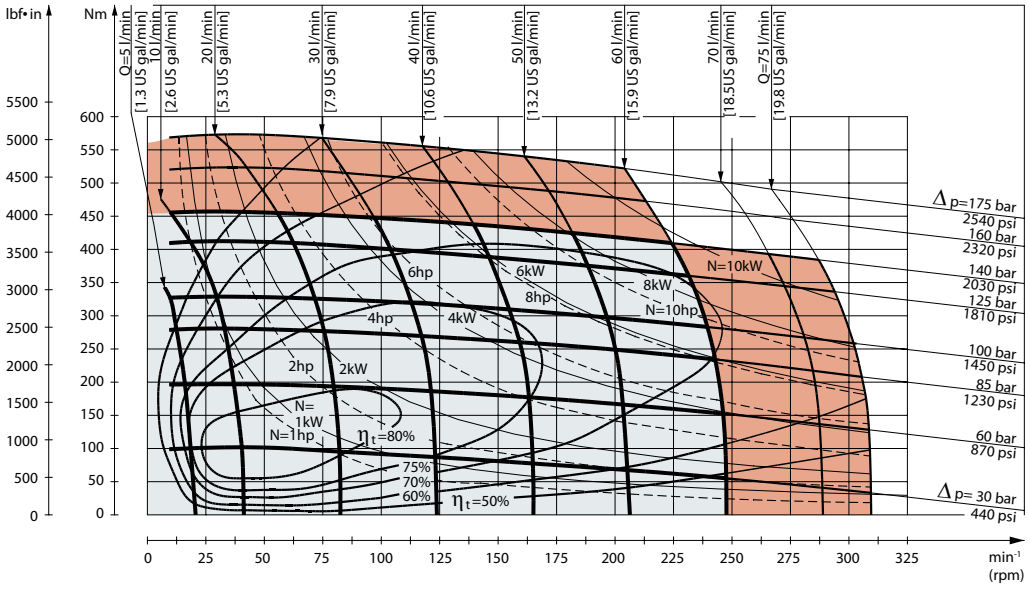


OMP function diagrams

OMP 200 function diagram

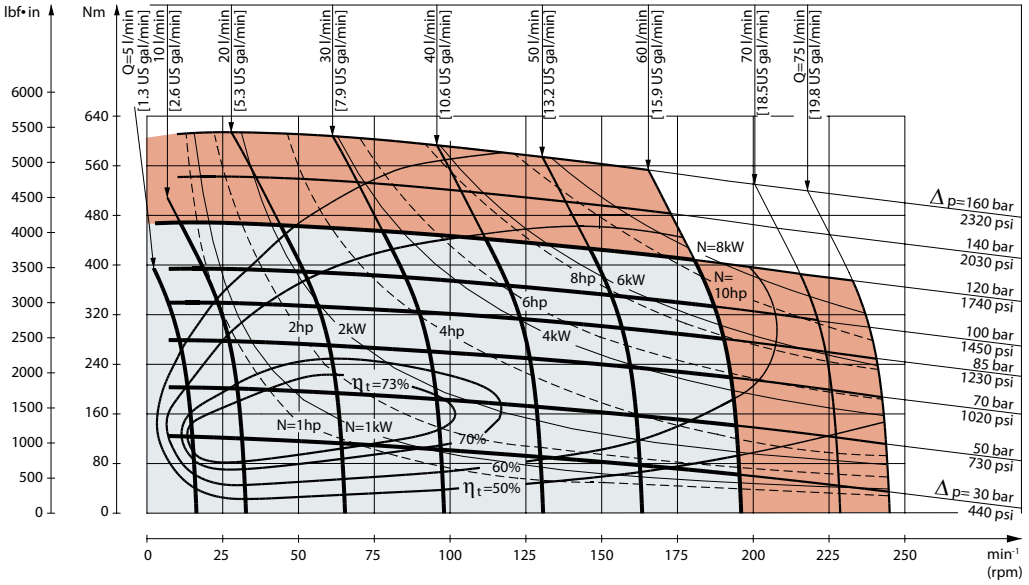


OMP 250 function diagram

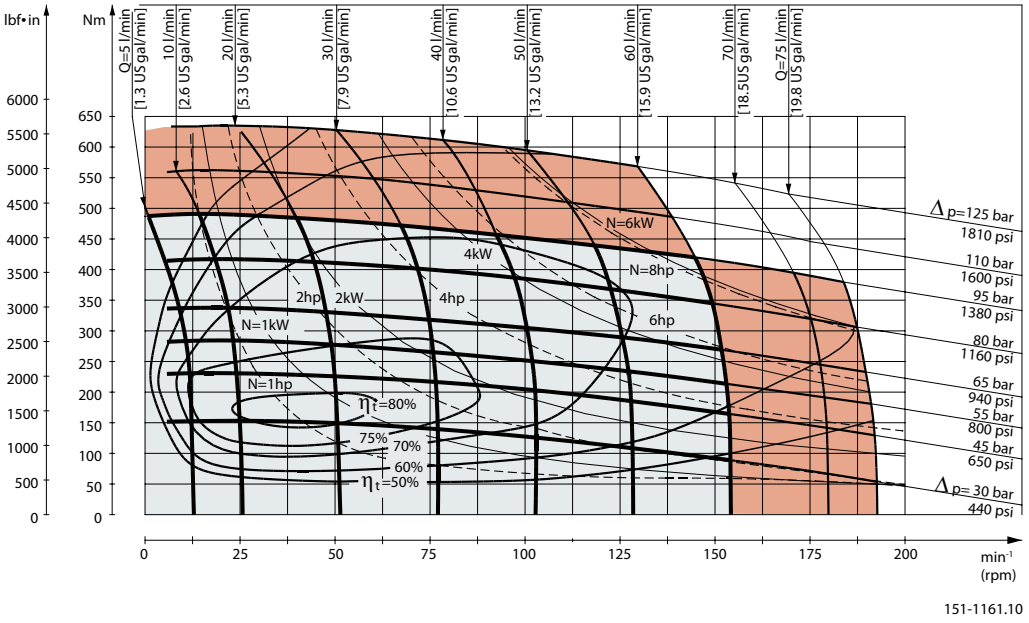


OMP function diagrams

OMP 315 function diagram

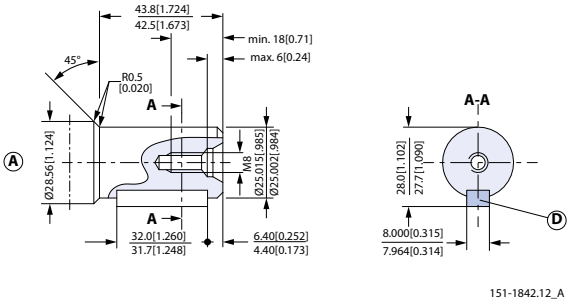


OMP 400 function diagram



OMP shaft version

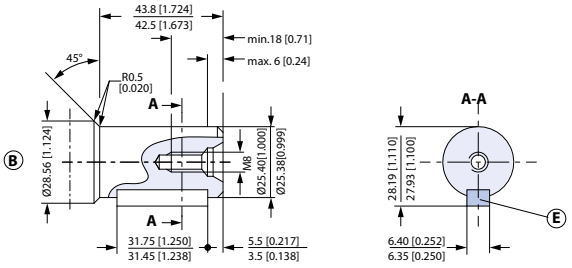
Shaft version



151-1842.12_A

A: Cylindrical shaft 25 mm

D: Parallel key A8 • 7 • 32 DIN 6885

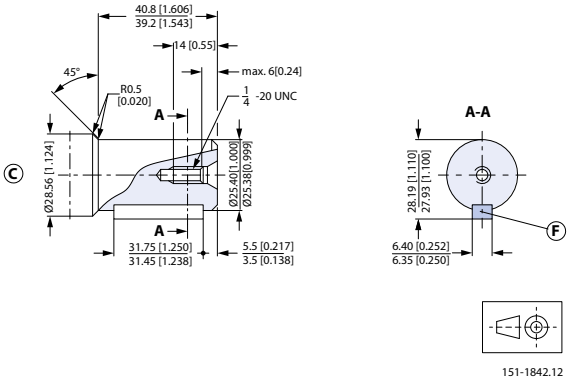


151-1842.12_B

B: Cylindrical shaft 1 in

E: Parallel key 1/4 • 1/4 • 11/4 in B.S. 46

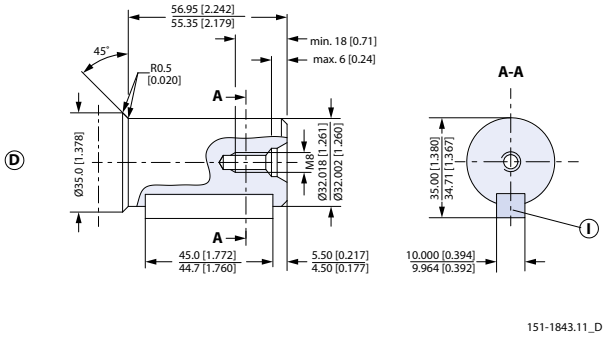
US version



151-1842.12

C: Cylindrical shaft 1 in

F: Parallel key 1/4 • 1/4 • 11/4 in B.S. 46

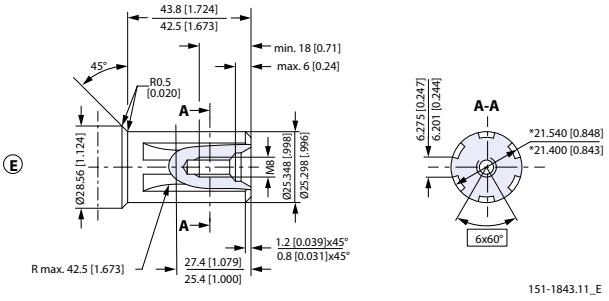


151-1843.11_D

D: Cylindrical shaft 32 mm

I: Parallel key A10 8 45 DIN 6885

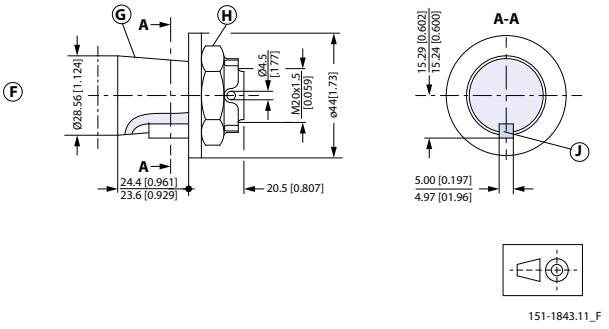
OMP shaft version



E: Splined shaft B.S. 2059 (SAE 6 B)

Straight-sided, bottom fitting, dep. Fit 2 Nom. size 1 in

* Deviates from BS 2059 (SAE 6B)



F: Tapered shaft

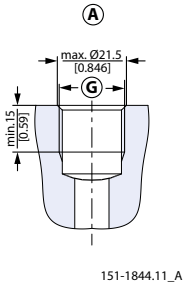
H: DIN 937 NV 30. Tightening torque: 100 ± 10 N•m [885 ± 88.50 lbf•in]

G: Taper 1:10

J: Parallel key B5 5 14 DIN 6885

OMP port thread versions

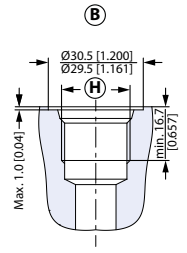
Port thread versions



151-1844.11_A

A: G main ports

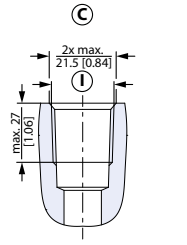
G: ISO 228/1 - G1/2



151-1844.11_B

B: UNF main ports

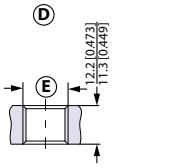
H: 7/8 - 14 UNF O-ring boss port



151-1844.11_C

C: NPTF main ports

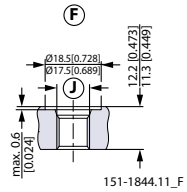
I: 1/2 - 14 NPTF



151-1844.11_D

D: G drain port

E: ISO 228/1 - G1/4



151-1844.11_F

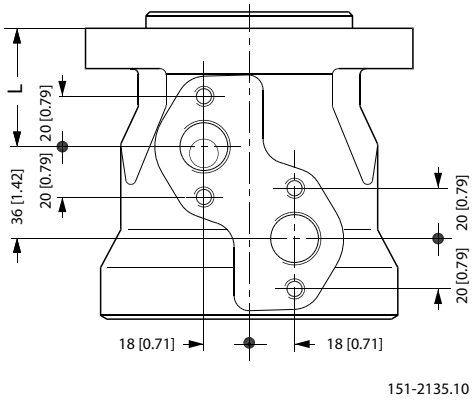
F: UNF drain port

J: 7/16 - 20 UNF O-ring boss port

OMP port thread versions

OMP manifold mount

European version



L: see dimensional drawing for given OMP motor:

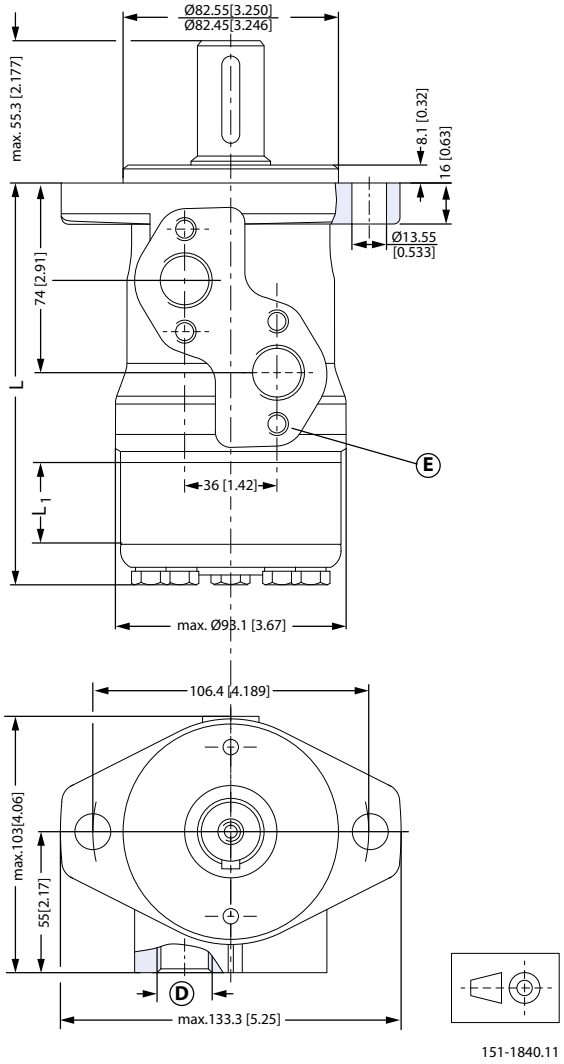
OMP dimensions - European version on page 33
OMP dimensions - US version on page 40

OMP dimensions

OMP dimensions - European version

OMP Side port version with 2 hole oval mounting flange (A2-flange)

Side port - European version



Tolerance for basic dimensions = ±1 mm [0.04 in]

D: G 1⁄2; 15 mm [0.59 in] deep

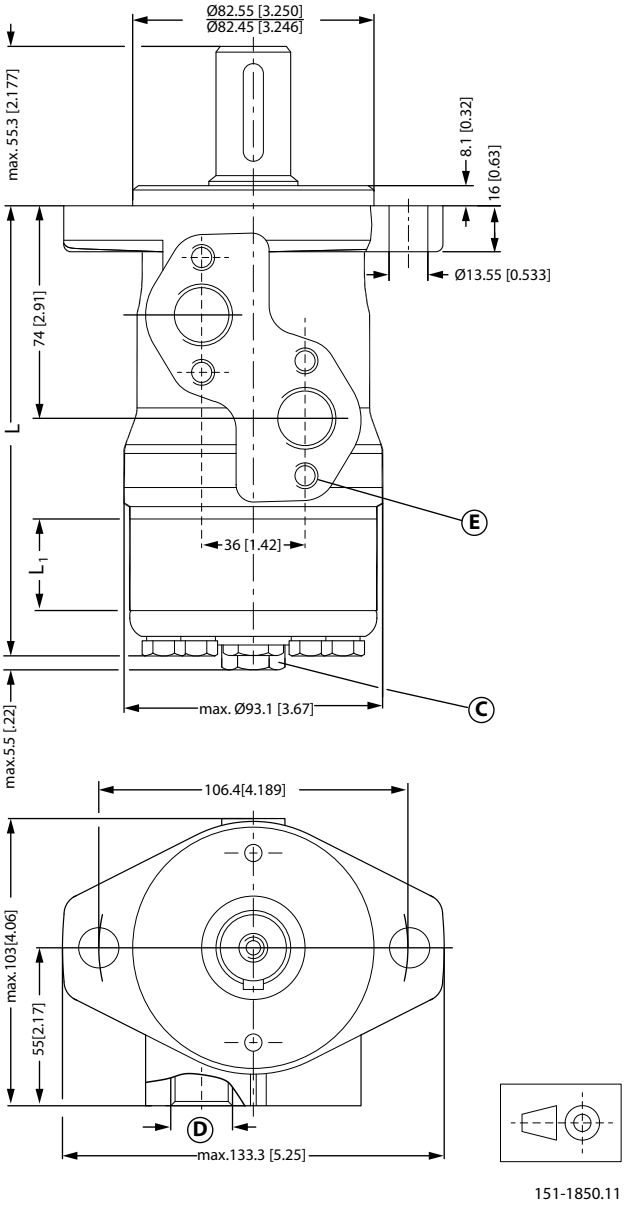
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		**OMP 25**	**OMP 32**	**OMP 40**	**OMP 50**	**OMP 80**	**OMP 100**	**OMP 125**	**OMP 160**	**OMP 200**	**OMP 250**	**OMP 315**	**OMP 400**
$L_{Max.}$	mm [in]	130.8 [5.15]	131.9 [5.19]	133.2 [5.24]	133.2 [5.24]	137.2 [5.40]	139.7 [5.50]	143.5 [5.65]	147.5 [5.81]	152.7 [6.01]	159.2 [6.27]	167.6 [6.60]	178.7 [7.04]
L_1	mm [in]	4.1 [0.16]	5.2 [0.20]	6.5 [0.26]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

Side port version with 2 hole oval mounting flange (A2-flange). With drain connection

Side port - European version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

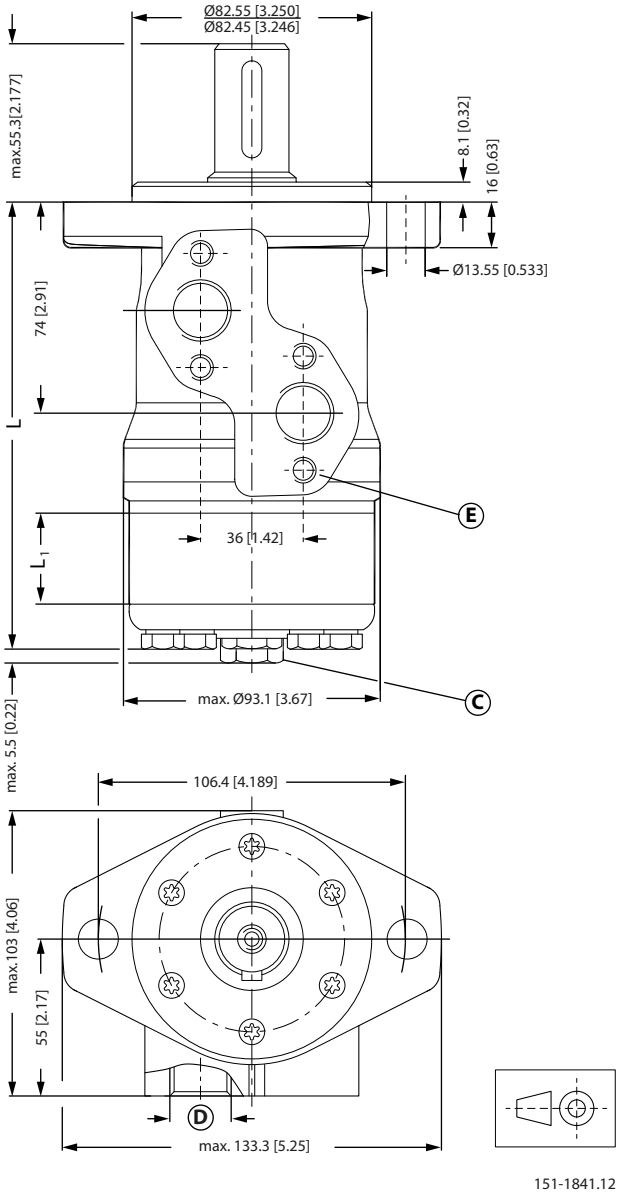
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		OMP 25	OMP 32	OMP 40	OMP 50	OMP 80	OMP 100	OMP 125	OMP 160	OMP 200	OMP 250	OMP 315	OMP 400
$L_{Max.}$	mm [in]	130.8 [5.15]	131.9 [5.19]	133.2 [5.24]	133.2 [5.24]	137.2 [5.40]	139.7 [5.50]	143.5 [5.65]	147.5 [5.81]	152.7 [6.01]	159.2 [6.27]	167.6 [6.60]	178.7 [7.04]
L_1	mm [in]	4.1 [0.16]	5.2 [0.20]	6.5 [0.26]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

OMP C and OMP N-side port version with 2 hole oval mounting flange (A2-flange)

Side port - European version



151-1841.12

Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

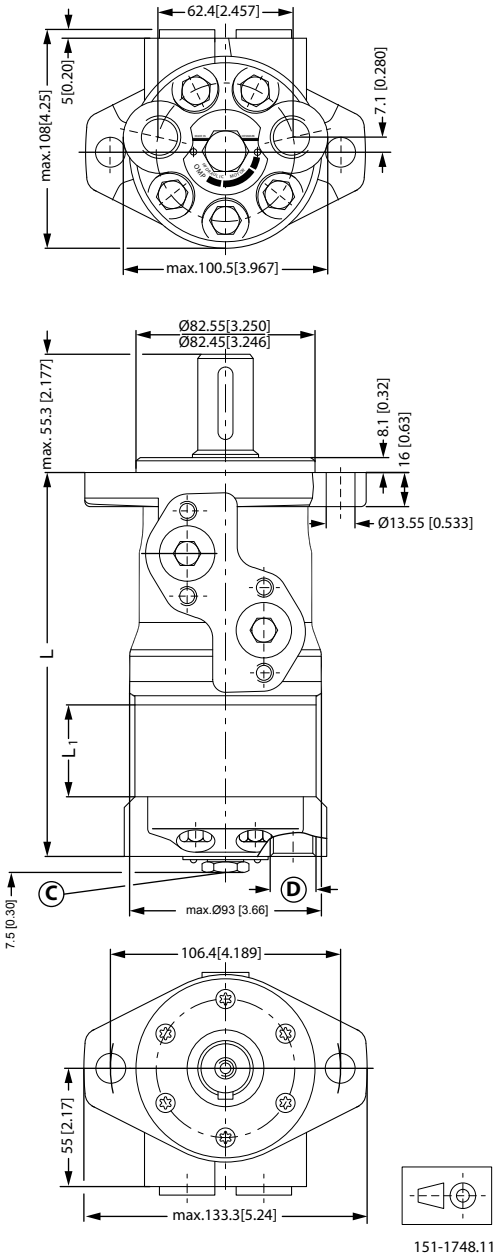
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		**OMP 25**	**OMP 32**	**OMP 40**	**OMP 50**	**OMP 80**	**OMP 100**	**OMP 125**	**OMP 160**	**OMP 200**	**OMP 250**	**OMP 315**	**OMP 400**
$L_{Max.}$	mm [in]	130.8 [5.15]	131.9 [5.19]	133.2 [5.24]	133.2 [5.24]	137.2 [5.40]	139.7 [5.50]	143.5 [5.65]	147.5 [5.81]	152.7 [6.01]	159.2 [6.27]	167.6 [6.60]	178.7 [7.04]
L_1	mm [in]	4.1 [0.16]	5.2 [0.20]	6.5 [0.26]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

End port version with 2 hole oval mounting flange (A2-flange)

End port - European version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection G ¼; 12 mm [0.47 in] deep

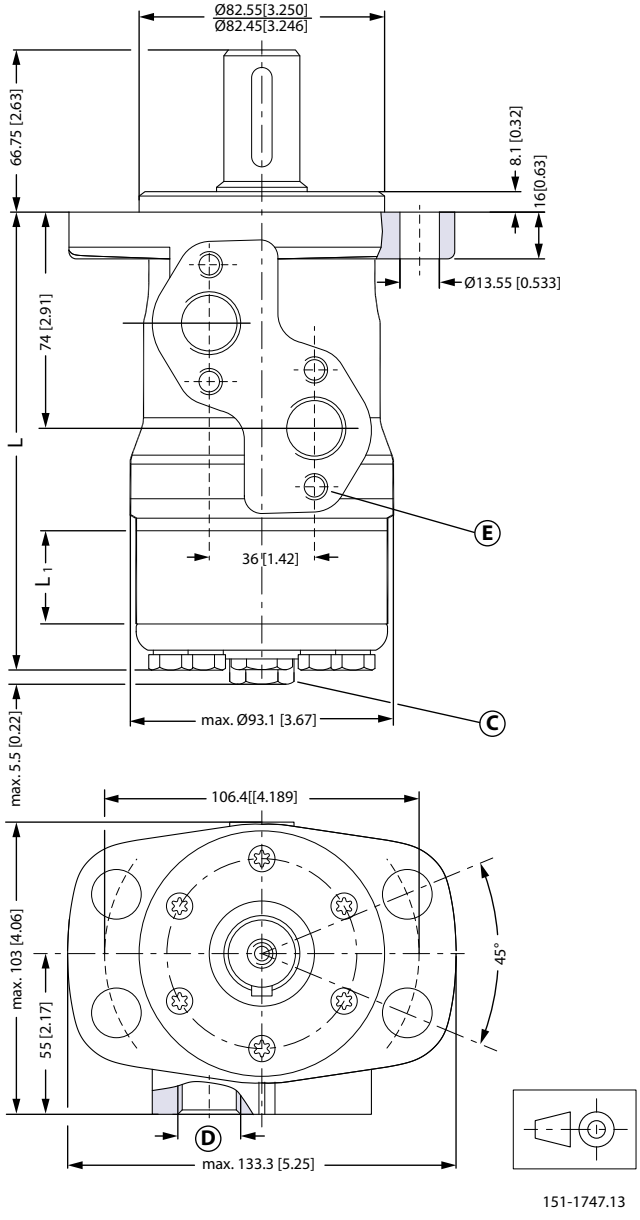
D: G ½; 15 mm [0.59 in] deep

Type		OMP 50	OMP 80	OMP 100	OMP 125	OMP 160	OMP 200	OMP 250	OMP 315	OMP 400
Max. L	mm [in]	146.7 [5.78]	150.6 [5.93]	153.2 [6.03]	157.0 [6.18]	161.0 [6.34]	166.2 [6.54]	172.7 [6.80]	181.1 [7.13]	192.2 [6.57]
L_1	mm [in]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

Side port version with 4 hole oval mounting flange (A4-flange)

Side port - European version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

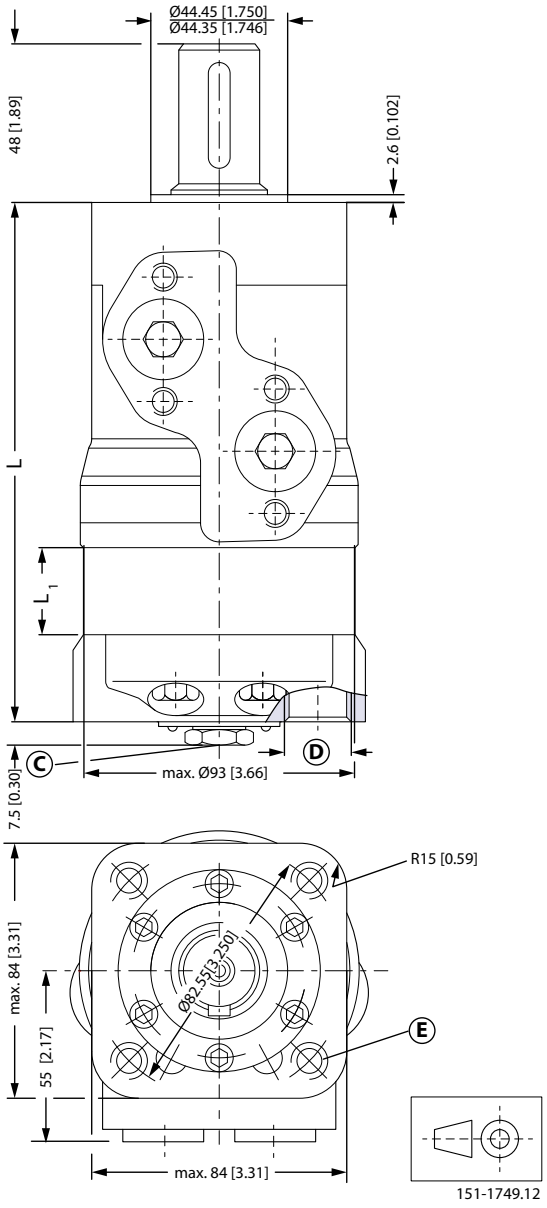
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		OMP 50	OMP 80	OMP 100	OMP 125	OMP 160	OMP 200	OMP 250	OMP 315	OMP 400
Max. L	mm [in]	133.2 [5.24]	137.2 [5.40]	139.7 [5.50]	143.5 [5.65]	147.5 [5.81]	152.7 [6.01]	159.2 [6.27]	167.6 [6.60]	178.7 [7.04]
L_1	mm [in]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

End port version with square mounting flange (C-flange)

End port - European version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection G ¼; 12 mm [0.47 in] deep (4 pcs.)

D: G ½; 15 mm [0.59 in] deep

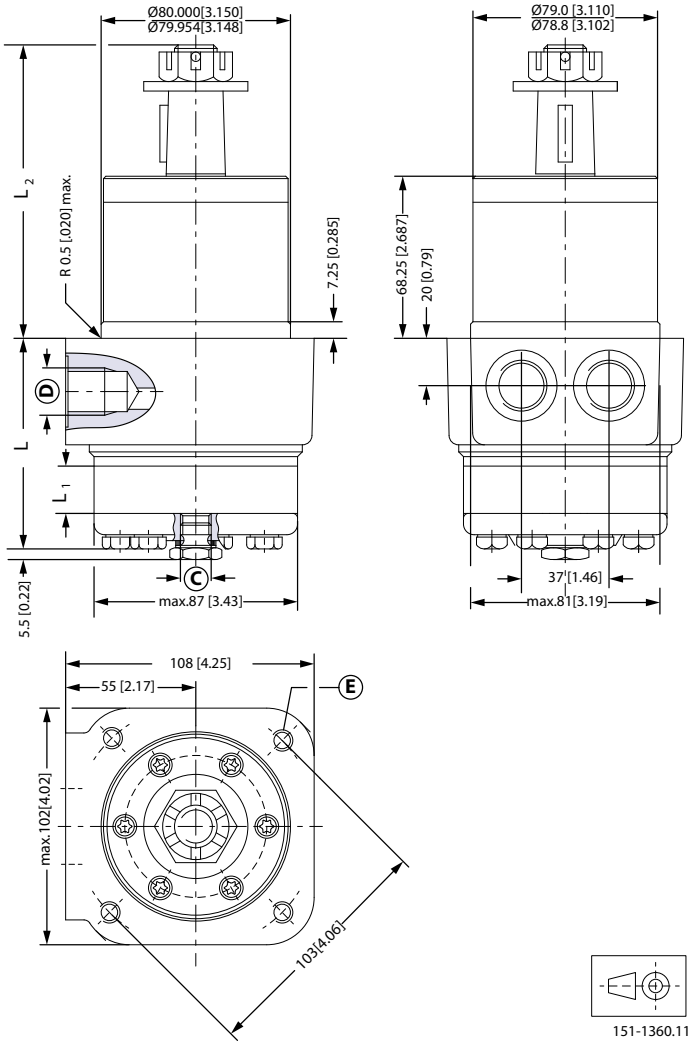
E: M10; 15 mm [0.59 in] deep

Type		OMP 50	OMP 80	OMP 100	OMP 125	OMP 160	OMP 200	OMP 250	OMP 315	OMP 400
Max. L	mm [in]	152.7 [6.01]	156.6 [6.17]	159.2 [6.27]	162.9 [6.41]	167.0 [6.57]	172.2 [6.78]	178.7 [7.04]	187.1 [7.37]	198.2 [7.80]
L_1	mm [in]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

OMPW and OMPW N wheel motor

Wheel motor -- European version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M10; 20 mm [0.79 in] deep (4 pcs.)

Output shaft. max.	**L_2 mm [in]**
Cylindrical shaft 25 mm [0.98 in]	max. 115 [4.53]
Tapered shaft 28.56 mm [1.12 in]	max. 117.8 [4.64]

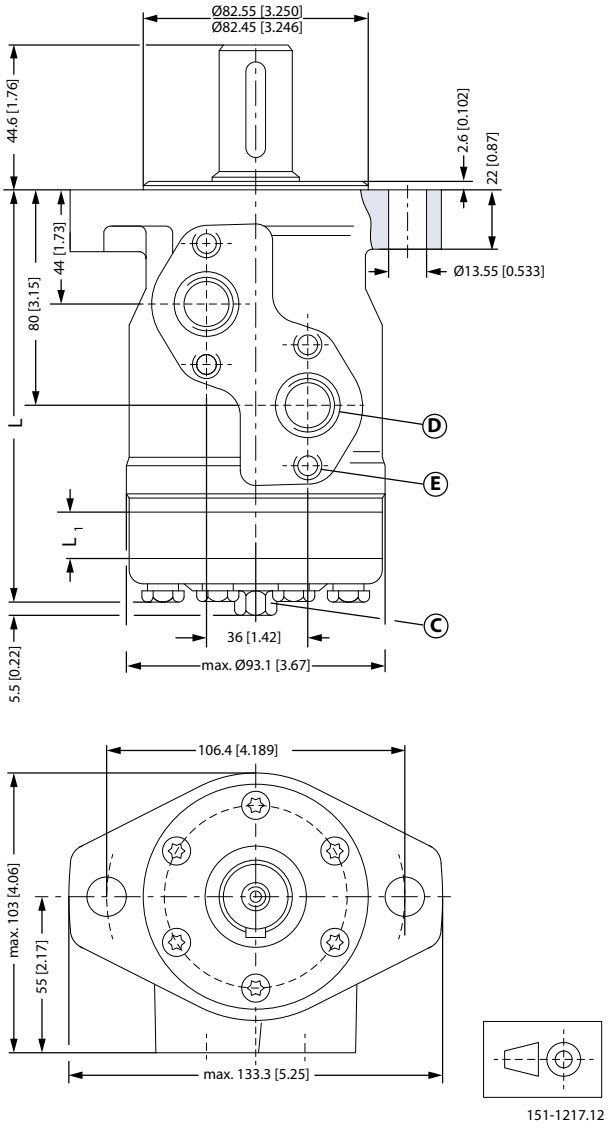
Type		**OMP 40**	**OMP 50**	**OMP 80**	**OMP 100**	**OMP 125**	**OMP 160**	**OMP 200**	**OMP 250**	**OMP 315**	**OMP 400**
Max. L	mm [in]	73.5 [2.89]	73.5 [2.89]	77.4 [3.05]	80.0 [3.15]	83.7 [3.30]	87.8 [3.46]	93.0 [3.66]	99.5 [3.92]	107.9 [4.25]	119.0 [4.69]
L_1	mm [in]	6.5 [0.26]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

OMP dimensions - US version

Side port version with 2 hole oval mounting flange (A2-flange)

Side port - US version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection 7/16 UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 16.7 mm [0.66 in] deep

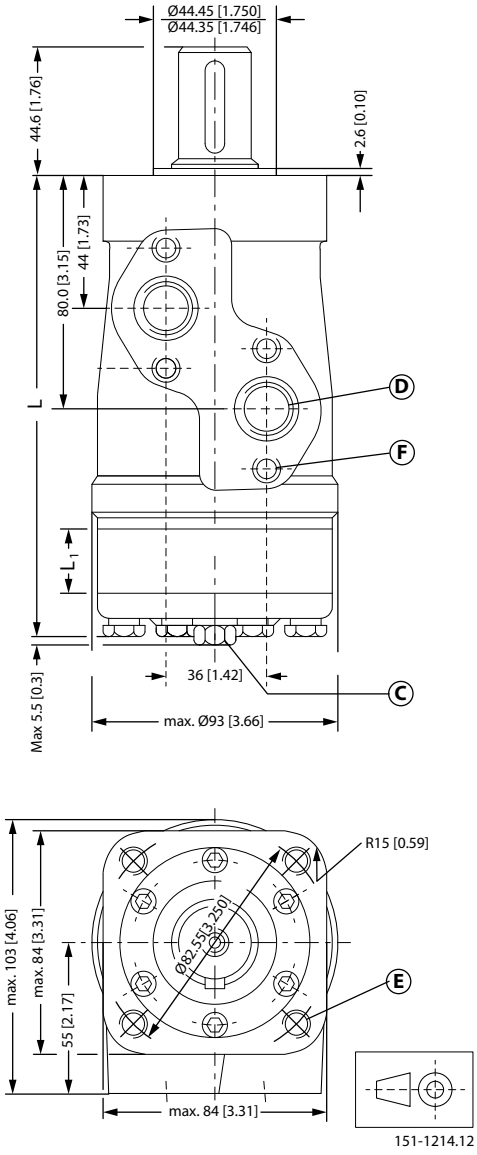
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		**OMP 25**	**OMP 32**	**OMP 40**	**OMP 50**	**OMP 80**	**OMP 100**	**OMP 125**	**OMP 160**	**OMP 200**	**OMP 250**	**OMP 315**	**OMP 400**
$L_{Max.}$	mm [in]	137.2 [5.40]	138.3 [5.44]	139.6 [5.50]	139.6 [5.50]	143.6 [5.65]	146.1 [5.75]	149.9 [5.90]	153.9 [6.06]	159.1 [6.26]	165.6 [6.52]	174.0 [6.85]	185.1 [7.29]
L_1	mm [in]	4.1 [0.16]	5.2 [0.20]	6.5 [0.26]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMP dimensions

Side port version with square mounting flange (C-flange)

Side port - US version



Tolerance for basic dimensions = ±1 mm [0.04 in]

C: Drain connection 7/16 - 20 UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 16.76 mm [0.66 in] deep or 1/2 - 14 NPTF

E: 3/8 - 16 UNC; 15 mm [0.59 in] deep (4 off)

F: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		**OMP 40**	**OMP 50**	**OMP 80**	**OMP 100**	**OMP 125**	**OMP 160**	**OMP 200**	**OMP 250**	**OMP 315**	**OMP 400**
Max. L	mm [in]	139.6 [5.50]	139.6 [5.50]	143.5 [5.65]	146.1 [5.75]	149.8 [5.90]	153.9 [6.06]	159.1 [6.26]	165.6 [6.52]	174.0 [6.85]	185.1 [7.29]
L_1	mm [in]	6.5 [0.26]	6.5 [0.26]	10.4 [0.41]	13.0 [0.51]	16.7 [0.66]	20.8 [0.82]	26.0 [1.02]	32.5 [1.28]	40.9 [1.61]	52.0 [2.05]

OMR versions and code numbers

OMR versions and code numbers

OMR standard motors

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	-	-	Yes	-	OMR	***A1***
Cyl. Ø25 mm	G 1/2	Side port	G 1/4	-	Yes	Yes	OMR	***A2***
Cyl. Ø25 mm	G 1/2	End port	G 1/4	Yes	-	Yes	OMR	***A3***
Cyl. 1 in	G 1/2	Side port	-	-	Yes	-	OMR	***A4***
Cyl. 1 in	G 1/2	Side port	G 1/4	-	Yes	Yes	OMR	***A5***
Cyl. 1 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMR	***A6***
Splined 1 in	G 1/2	Side port	-	-	Yes	-	OMR	***A7***
Splined 1 in	G 1/2	Side port	G 1/4	-	Yes	Yes	OMR	***A8***
Splined 1 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMR	***A9***
Cyl. Ø32 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMR	***A10***
Tap. Ø28.5 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMR	***A11***

Code numbers

Conf. code	Displacement								
	50	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
A1	151-0410	151-0411	151-0412	151-0413	151-0414	151-0415	151-0416	151-0417	151-0418
A2	151-0710	151-0711	151-0712	151-0713	151-0714	151-0715	151-0716	151-0717	151-0718
A3	151-6190	151-6191	151-6192	151-6193	151-6194	151-6195	151-6196	151-6197	151-6198
A4	151-0400	151-0401	151-0402	151-0403	151-0404	151-0405	151-0406	151-0407	151-0408
A5	151-0700	151-0701	151-0702	151-0703	151-0704	151-0705	151-0706	151-0707	151-0708
A6	151-7240	151-7241	151-7242	151-7243	151-7244	151-7245	151-7246	151-7247	151-7248
A7	151-0420	151-0421	151-0422	151-0423	151-0424	151-0425	151-0426	151-0427	151-0428
A8	151-0720	151-0721	151-0722	151-0723	151-0724	151-0725	151-0726	151-0727	151-0728
A9	151-7250	151-7251	151-7252	151-7253	151-7254	151-7255	151-7256	151-7257	151-7258
A10	151-0248	151-0242	151-0243	151-0208	151-0244	151-0245	151-0247	151-0246	151-6294
A11	151-0265	151-0266	151-0267	151-6295	151-0268	151-0269	151-0271	151-0270	151-6296

Mounting flange : 4 hole oval flange (A4)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMR	***B1***
Cyl. Ø32 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMR	***B2***
Cyl. Ø1 1/4 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMR	***B3***

OMR versions and code numbers

Code numbers

Conf. code	Displacement								
	50	80	100	125	160	200	250	315	375
B1	151-6010	151-6011	151-6012	151-6013	151-6014	151-6015	151-6016	151-6017	151-6018
B2	151-6000	151-6001	151-6002	151-6003	151-6004	151-6005	151-6006	151-6007	151-6008
B3	151-6110	151-6111	151-6112	151-6113	151-6114	151-6115	151-6116	151-6117	151-6118

Mounting flange: Square flange (C)

Spigot diamer	**Ø44.4 mm [1.75 in]**							
Bolt circle diameter	**Ø82.5 mm [3.25 in]**							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	End port	G 1/4	Yes	-	Yes	OMR	***C1***
Cyl. 1 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMR	***C2***

Code numbers

Conf. code	Displacement								
	50	80	100	125	160	200	250	315	375
C1	151-6210	151-6211	151-6212	151-6213	151-6214	151-6215	151-6216	151-6217	151-6218
C2	151-7260	151-7261	151-7262	151-7263	151-7264	151-7265	151-7266	151-7267	151-7269

OMR motors with corrosion resistant parts

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	**Ø82.5 mm [3.25 in]**							
Bolt circle diameter	**Ø106.4 mm [4.20 in]**							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	G1/4	Yes	-	Yes	OMR C	***D1***

Code numbers

Conf. code	Displacement								
	50	80	100	125	160	200	250	315	375
D1	151-1231	151-1232	151-1233	151-1238	151-1234	151-1235	151-1236	151-1237	151-1243

OMR versions and code numbers

OMR motors with needle bearings

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	G1/4	Yes	-	Yes	OMR N	***E1***

Code numbers

Conf. code	Displacement								
	50	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
E1	151-6380	151-6381	-	151-6383	151-6384	151-6385	151-6386	151-6387	151-6388

OMRW motors with needle bearings

Mounting flange: Wheel

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø147.6 mm [5.81 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Tap. Ø35 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMRW N	***F1***
Tap. Ø 1 1/4 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMRW N	***F2***

Code numbers

Conf. code	Displacement								
	50	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
F1	151-6300	151-6301	151-6302	151-6303	151-6304	151-6305	151-6306	151-6307	151-6308
F2	151-6430	151-6431	151-6432	151-6433	151-6434	151-6435	151-6436	151-6437	151-6438

OMR motors with integrated brake

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø25 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMR F	***G1***

OMR versions and code numbers

Code numbers

Conf. code	Displacement								
	50	80	100	125	160	200	250	315	375
G1	-	151-6461	151-6462	151-6463	151-6464	151-6465	151-6466	151-6467	151-6468

OMR motors with integrated brake and needle bearings

Mounting flange: 2 hole oval flange (A2)

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø106.4 mm [4.20 in]							
Shaft	Main port size	Port style	Drain port size	Standard shaft seal	High pressure shaft seal	Check valve	Main type designation	Conf. code
Cyl. 1 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMR NF	***H1***

Code numbers

Conf. code	Displacement								
	50	80	100	125	160	200	250	315	375
H1	-	151-6471	151-6472	151-6473	151-6474	151-6475	151-6476	151-6477	151-6478

OMRW motors with integrated brake and needle bearings

Mounting flange: Wheel

Spigot diamer	Ø82.5 mm [3.25 in]							
Bolt circle diameter	Ø147.6 mm [5.81 in]							
Shaft	Main port size	Port style	Drain port size	Standard shaft seal	High pressure shaft seal	Check valve	Main type designation	Conf. code
Tap. Ø35 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMRW NF	***J1***

Code numbers

Conf. code	Displacement								
	50	80	100	125	160	200	250	315	375
J1	-	-	151-6442	151-6443	151-6444	151-6445	-	-	-

Features available (options)

Low leakage (low speed valve) Reverse rotation

Speed sensor Painted

Viton shaft seal

OMR technical data

Technical data for OMR with 25 mm and 1 in cylindrical shaft

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Geometric displacement	cm^3		51.6	80.3	99.8	125.7	159.6	199.8	249.3	315.7	372.6
	[inch]		[3.16]	[4.91]	[6.11]	[7.69]	[9.77]	[12.23]	[15.26]	[19.32]	[22.80]
Max. speed	min^{-1}	cont.	775	750	600	475	375	300	240	190	160
	[rpm]	int.[1]	970	940	750	600	470	375	300	240	200
Max. torque	N•m [lbf•in]	cont.	100	195	240	300	300	300	300	300	300
			[890]	1730]	[2120]	[2660]	[2660]	[2660]	[2660]	[2660]	[2660]
		int.[1]	130	220	280	340	390	390	380	420	430
			[1150]	[1960]	[2480]	[3010]	[3450]	[3450]	[3360]	[3720]	[3810]
Max. output	kW [hp]	cont.	7.0	12.5	13.0	12.5	10.0	8.0	6.0	5.0	4.0
			[9.4]	[16.8]	[17.4]	[16.8]	[13.4]	[10.7]	[8.1]	[6.7]	[5.4]
		int.[1]	8.5	15.0	15.0	14.5	12.5	10.0	8.0	6.5	6.0
			[11.4]	[20.1]	[20.1]	[19.4]	[16.8]	[13.4]	[10.7]	[8.7]	[8.1]
Max. pressure drop	bar [psi]	cont.	140	175	175	175	130	110	80	70	55
			[2030]	[2540]	[2540]	[2540]	[1890]	[1600]	[1160]	[1020]	[800]
		int.[1]	175	200	200	200	175	140	110	100	85
			[2540]	[2900]	[2900]	[2900]	[2540]	[2030]	[1600]	[1450]	[1230]
		peak[2]	225	225	225	225	225	225	200	150	130
			[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[2900]	[2180]	[1890]
Max. oil flow	l/min [US gal/min]	cont.	40	60	60	60	60	60	60	60	60
			[10.6]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]
		int.[1]	50	75	75	75	75	75	75	75	75
			[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
Max. starting pressure with unloaded shaft	bar		10	10	10	9	7	5	5	5	5
	[psi]		[145]	[145]	[145]	[130]	[100]	[75]	[75]	[75]	[75]
Min starting torque	at max. press drop cont. N•m [lbf•in]		80	150	200	250	240	260	240	260	240
			[710]	[1330]	[1770]	[2210]	[2120]	[2300]	[2120]	[2300]	[2120]
	at max. press.drop int.[1] N•m [lbf•in]		100	170	230	280	320	330	310	350	380
			[890]	[1510]	[2040]	[2480]	[2830]	[2920]	[2740]	[3100]	[3360]

[1] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2] Peak load: the permissible values may occur for max. 1% of every minute.

Technical data for OMR with 1 in splined and 28.5 mm tapered shaft

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Geometric displacement	cm^3		51.6	80.3	99.8	125.7	159.6	199.8	249.3	315.7	372.6
	[inch]		[3.16]	[4.91]	[6.11]	[7.69]	[9.77]	[12.23]	[15.26]	[19.32]	[22.80]
Max. speed	min^{-1}	cont.	775	750	600	475	375	300	240	190	160
	[rpm]	int.[1]	970	940	750	600	470	375	300	240	200
Max. torque	N•m [lbf•in]	cont.	100	195	240	300	360	360	360	360	360
			[890]	[1730]	[2120]	[2660]	[3190]	[3190]	[3190]	[3190]	[3190]
		int.[1]	130	220	280	340	430	440	470	470	460
			[1150]	[1950]	[2480]	[3010]	[3810]	[3890]	[4160]	[4160]	[4070]

OMR technical data

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Max. output	kW [hp]	cont.	7.0	12.5	13.0	12.5	12.5	10.0	7.0	5.0	5.0
			[9.4]	[16.8]	[17.4]	[16.8]	[16.8]	[13.4]	[9.4]	[6.7]	[6.7]
		int.[1]	8.5	15.0	15.0	14.5	14.0	13.0	9.5	8.0	7.0
			[11.4]	[20.1]	[20.1]	[19.4]	[18.8]	[17.4]	[12.7]	[10.7]	[9.4]
Max. pressure drop	bar [psi]	cont.	140	175	175	175	165	130	100	85	70
			[2030]	[2540]	[2540]	[2540]	[2390]	[1890]	[1450]	[1230]	[1020]
		int.[1]	175	200	200	200	200	175	140	115	90
			[2540]	[2900]	[2900]	[2900]	[2900]	[2540]	[2030]	[1670]	[1310]
		peak[2]	225	225	225	225	225	225	200	150	130
			[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[2900]	[2180]	[1890]
Max. oil flow	l/min [US gal/min]	cont.	40	60	60	60	60	60	60	60	60
			[10.6]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]
		int.[1]	50	75	75	75	75	75	75	75	75
			[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
Max. starting pressure with unloaded shaft	bar		10	10	10	9	7	5	5	5	5
	[psi]		[145]	[145]	[145]	[130]	[100]	[75]	[75]	[75]	[75]
Min starting torque	at max. press drop cont. N•m [lbf•in]		80	150	200	250	300	300	290	315	300
			[710]	[1330]	[1770]	[2210]	[2660]	[2660]	[2570]	[2790]	[2660]
	at max. press.drop int.[1] N•m [lbf•in]		100	170	230	280	350	400	400	400	380
			[890]	[1510]	[2040]	[2480]	[3100]	[3540]	[3540]	[3540]	[3360]

[1] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2] Peak load: the permissible values may occur for max. 1% of every minute.

Technical data for OMR with 32 mm , 1 ¼ in cylindrical shaft and 35 mm, 1 ¼ in tapered shaft

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Geometric displacement	cm^3		51.6	80.3	99.8	125.7	159.6	199.8	249.3	315.7	372.6
	[inch]		[3.16]	[4.91]	[6.11]	[7.69]	[9.77]	[12.23]	[15.26]	[19.32]	[22.80]
Max. speed	min^{-1}	cont.	775	750	600	475	375	300	240	190	160
	[rpm]	int.[1]	970	940	750	600	470	375	300	240	200
Max. torque	N•m [lbf•in]	cont.	100	195	240	300	380	450	540	550	580
			[890]	[1730]	[2120]	[2660]	[3360]	[3980]	[4780]	[4870]	[5130]
		int.[1]	130	220	280	340	430	500	610	690	690
			[1150]	[1957]	[2480]	[3010]	[3810]	[4430]	[5400]	[6110]	[6110]
Max. output	kW [hp]	cont.	7.0	12.5	13.0	12.5	12.5	11.0	10.0	9.0	7.5
			[9.4]	[16.8]	[17.4]	[16.8]	[16.8]	[14.8]	[13.4]	[12.1]	[10.1]
		int.[1]	8.5	15.0	15.0	14.5	14.0	13.0	12.0	10.0	9.0
			[11.4]	[20.1]	[20.1]	[19.4]	[18.8]	[17.4]	[16.1]	[13.4]	[12.1]
Max. pressure drop	bar [psi]	cont	140	175	175	175	175	175	175	135	115
			[2030]	[2540]	[2540]	[2540]	[2540]	[2540]	[2540]	[1960]	[1670]
		int.[1]	175	200	200	200	200	200	200	175	150
			[2540]	[2900]	[2900]	[2900]	[2900]	[2900]	[2900]	[2540]	[2180]
		peak[2]	225	225	225	225	225	225	225	210	175
			[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[3050]	[2540]

OMR technical data

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Max. oil flow	l/min [US gal/min]	cont.	40	60	60	60	60	60	60	60	60
			[10.6]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]
		int.[1]	50	75	75	75	75	75	75	75	75
			[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
Max. starting pressure with unloaded shaft	bar		10	10	10	9	7	5	5	5	5
	[psi]		[145]	[145]	[145]	[130]	[100]	[75]	[75]	[75]	[75]
Min starting torque	at max. press drop cont. N•m [lbf•in]		80	150	200	250	320	410	500	500	470
			[710]	[1330]	[1770]	[2210]	[2830]	[3630]	[4430]	[4430]	[4170]
	at max. press.drop int.[1] N•m [lbf•in]		100	170	230	280	370	460	550	660	570
			[890]	[1510]	[2040]	[2480]	[3280]	[4070]	[4870]	[5840]	[5050]

[1] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2] Peak load: the permissible values may occur for max. 1% of every minute.

Type			Max. inlet pressure	Max.return pressure with drain line
OMR 50 - 375	bar [psi]	cont	175 [2540]	175 [2540]
	bar [psi]	int.[1]	200 [2900]	200 [2900]
	bar [psi]	peak[2]	225[3260]	225 [3260]

[1] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2] Peak load: the permissible values may occur for max. 1% of every minute.

Technical data for parking brake motor OMR F, OMR NF and OMRW NF

Technical data for brake motor		
Holding torque[1]	N•m [lbf•in]	400 [3540]
Min. release pressure [2]	bar [psi]	21 [305]
Max. pressure in brake line	bar [psi]	200 [2900]

[1] This brake is to be used only as a passive parking brake. It may not be used for dynamic braking.

[2] Brake motors must always have a drain line. The brake release pressure is the difference between the pressure in the brake release line and the pressure in the drain line.

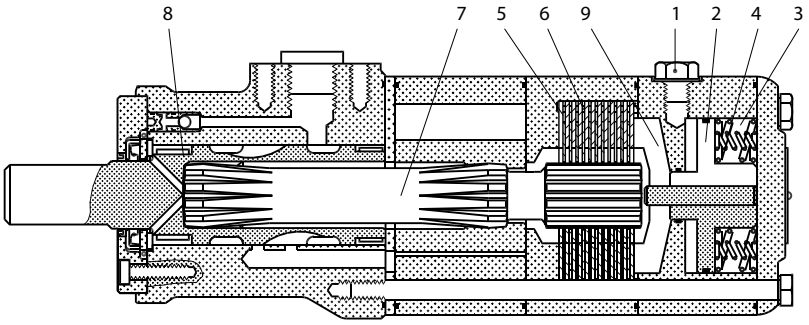
OMR F function

In normal condition where there is no pressure on the integrated brake in OMR, i.e. the brake is applied. The brake is released when hydraulic pressure of 21 bar [300 psi] min. is applied to the brake release port (1).

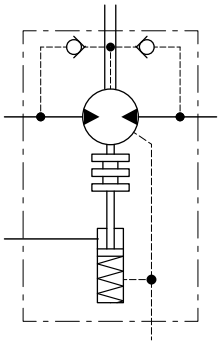
The pressure forces the piston (2) against the springs (3 and 4) disengaging the outer and inner discs (5 and 6) from each other so that the cardan shaft (7) and consequently output shaft (8) become free to rotate.

If the pressure on the brake release port is reduced to less than 21 bar [300 psi], the springs force the piston and pressure pad (9) against the brake discs and the cardan shaft/output shaft begin to lock up.

OMR technical data



151-1739.10.10



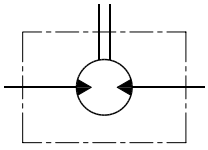
151-1726.10

Maximum permissible shaft seal pressure

OMR with High Pressure Shaft seal (HPS)

OMR with HPS, without check valves and without drain connection:

The shaft seal pressure equals the average of input pressure and return pressure



151-1743.10

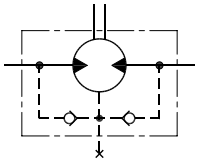
$$P_{seal} = \frac{P_{in} + P_{return}}{2}$$

OMR with HPS, check valves and with drain connection:

The shaft seal pressure equals the pressure in the drain line.

OMR with HPS, check valves and without drain connection:

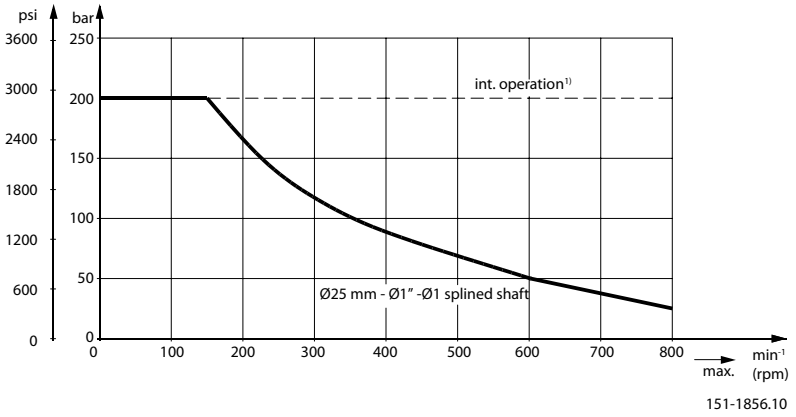
The pressure on the shaft seal never exceeds the pressure in the return line.



151-320.10

OMR technical data

Max. permissible shaft seal pressure

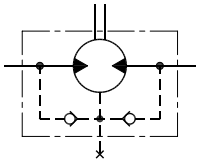


151-1856.10

OMR with Standard Shaft seal

OMR with standard shaft seal, check valves and without use of drain connection:

The pressure on the shaft seal never exceeds the pressure in the return line

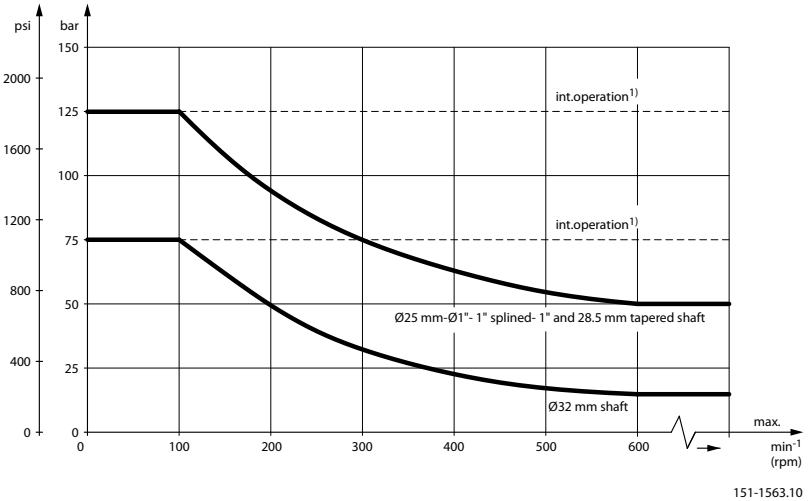


151-320.10

OMR with standard shaft seal, check valves and with drain connection:

The shaft seal pressure equals the pressure on the drain line.

Max. return pressure without drain line or max. pressure in the drain line



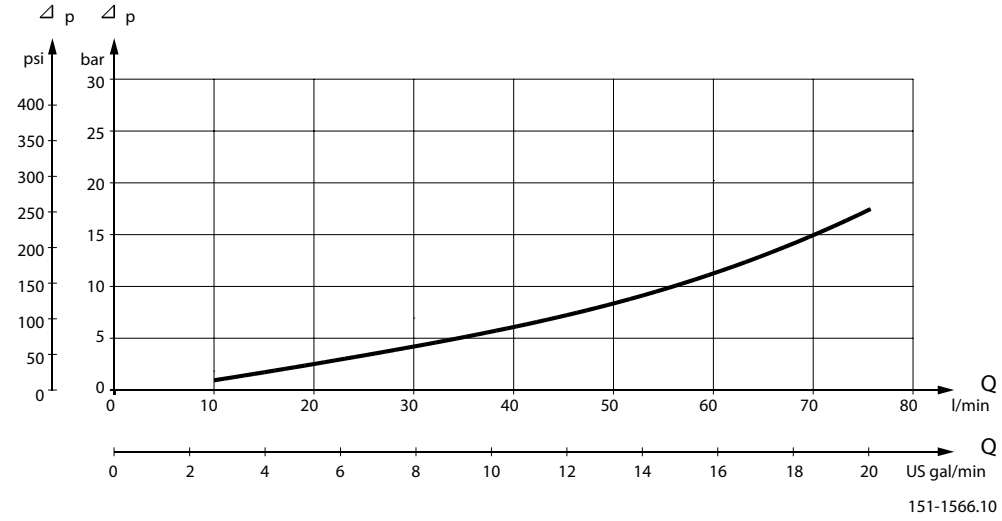
151-1563.10

1) Intermittent operation: the permissible values may occur for max. 10% of every minute.

OMR technical data

Pressure drop in OMR motor

The curve applies to an unloaded motor shaft and an oil viscosity of 35 mm²/s [165 SUS]



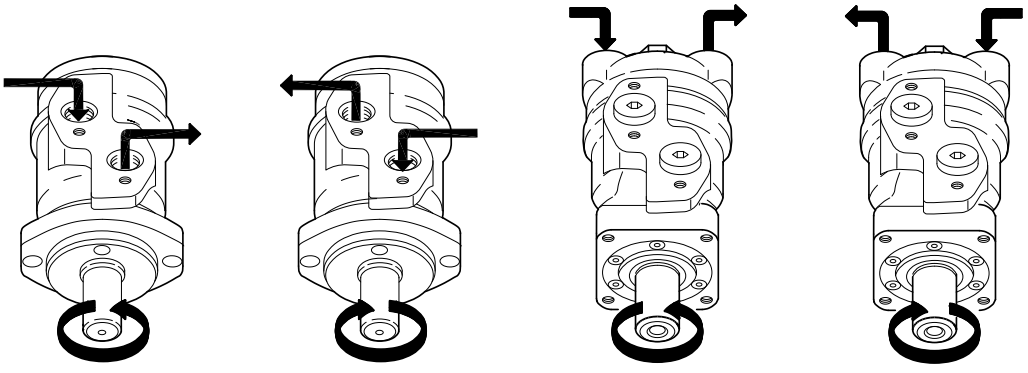
151-1566.10

Oil flow in drain line

The table shows the maximum oil flow in the drain line at a return pressure less than 5-10 bar [75-150 psi].

Pressure drop		Viscosity		Oil flow in drain line	
bar	**[psi]**	**mm²/s**	**[SUS]**	**l/min**	**[US gal/min]**
100	[1450]	20	[100]	2.5	[0.66]
		35	[165]	1.8	[0.78]
140	[2030]	20	[100]	3.5	[0.93]
		35	[165]	2.8	[0.74]

Direction of shaft rotation



151-1836.10

Permissible shaft loads

OMR technical data

OMP and OMR

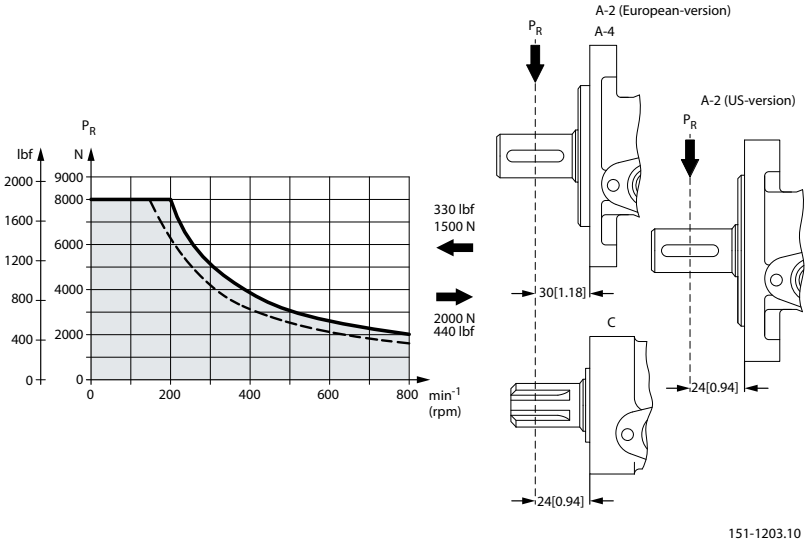
The permissible radial shaft load (P_R) depends on:

- Speed (n)
- Distance (L) from the point of load to the mounting flange
- Mounting flange version
- Shaft version

Mounting flange	**4-oval flange**** **2-hole oval flange (European version)**	**4-hole oval flange**	**Square flange**** **2-hole oval flange (US-version)**
Shaft version	**25 mm cylindrical shaft 1 in cylindrical shaft 1 in splined shaft**	**32 mm cylindrical shaft**	**25 mm cylindrical shaft**
Permissible shaft load (P_R) - l in mm	$\frac{800}{n} \cdot \frac{250000\ N^*}{95 + L}$	$\frac{800}{n} \cdot \frac{187500\ N^*}{95 + L}$	$\frac{800}{n} \cdot \frac{250000\ N^*}{101 + L}$
Permissible shaft load (P_R) - l in inch	$\frac{800}{n} \cdot \frac{2215\ lbf^*}{3.74 + L}$	$\frac{800}{n} \cdot \frac{1660\ lbf^*}{3.74 + L}$	$\frac{800}{n} \cdot \frac{2215\ lbf^*}{3.98 + L}$

** For both European and US-version

* n≥ 200 min^{-1} [rpm]; ≤ 55 mm [2.2 in]. n< 200 min^{-1} [rpm]; = > P_{Rmax} = 8000 N [1800 lbf]



--------- cylindrical shaft 32 mm [1.26 in]

_____ other shaft versions

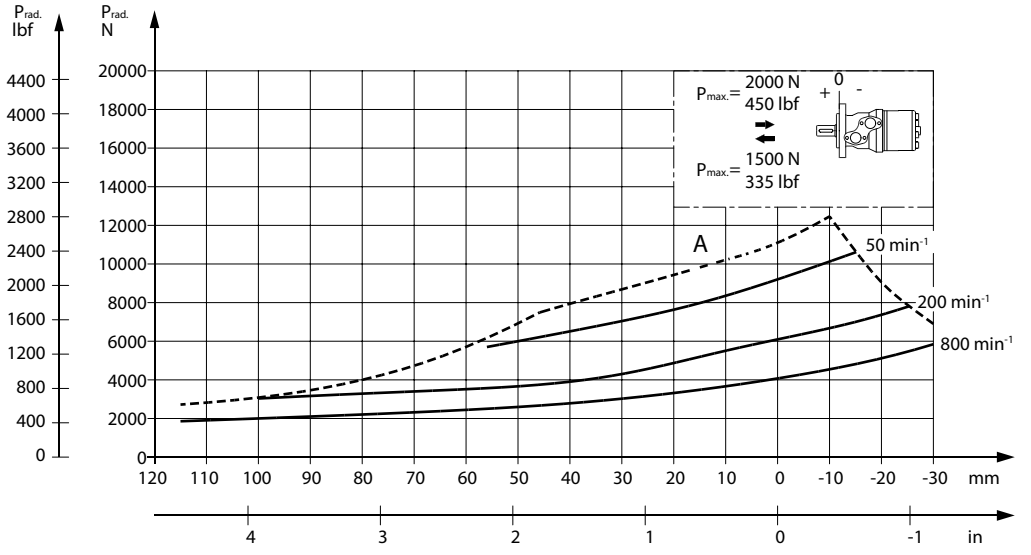
The curve shows the relation between P_R and n

- when l = 30 mm [1.18 in] for motors with A2 (European version) and A4 oval mounting flange
- when l = 24 mm [0.94 in] for motors with square mounting flange and A2 (US version)

For applications with special performance requirements we recommend OMP and OMR with the output shaft running in needle bearings.

OMR technical data

OMR N and OMR NF with Needle Bearings



151-2112.10

The output shaft on OMR N and OMR NF runs in needle bearings. These bearings and the recessed mounting flange allow a higher permissible radial load in comparison to OMR motors with slide bearings.

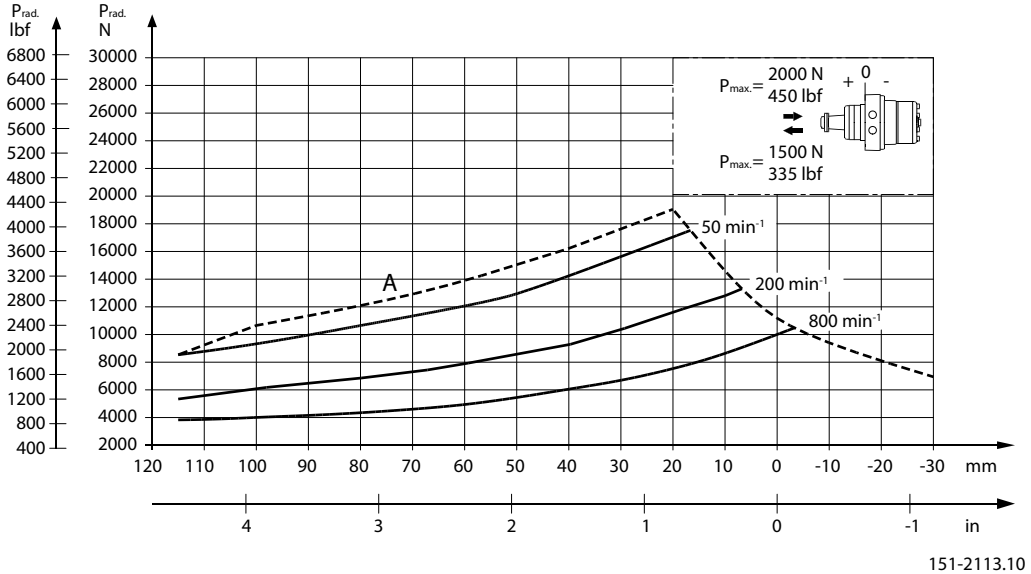
The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

Curve A shows max. radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of breakage.

The other curves apply to a B10 bearing life of 2000 hours at the number of revolutions indicated by the curve letter. Mineral based hydraulic oil with a sufficient content of anti-wear additives must be used.

Bearing life calculations can be made using the explanation and formula provided in the chapter »Bearing dimensioning« in the technical information *Orbital Motors General* 520L0232.

OMRW N and OMRW NF with Needle Bearings



151-2113.10

OMR technical data

The output shaft on OMRW N runs in needle bearings. These bearings and the recessed mounting flange allow a higher permissible radial load in comparison to OMR motors with slide bearings.

The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

Curve A shows max. radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of breakage.

The other curves apply to a B10 bearing life of 2000 hours at the number of revolutions indicated by the curve letter. Mineral based hydraulic oil with a sufficient content of anti-wear additives must be used.

Bearing life calculations can be made using the explanation and formula provided in the chapter »Bearing dimensioning« in the technical information *Orbital Motors General* 520L0232.

OMR function diagrams

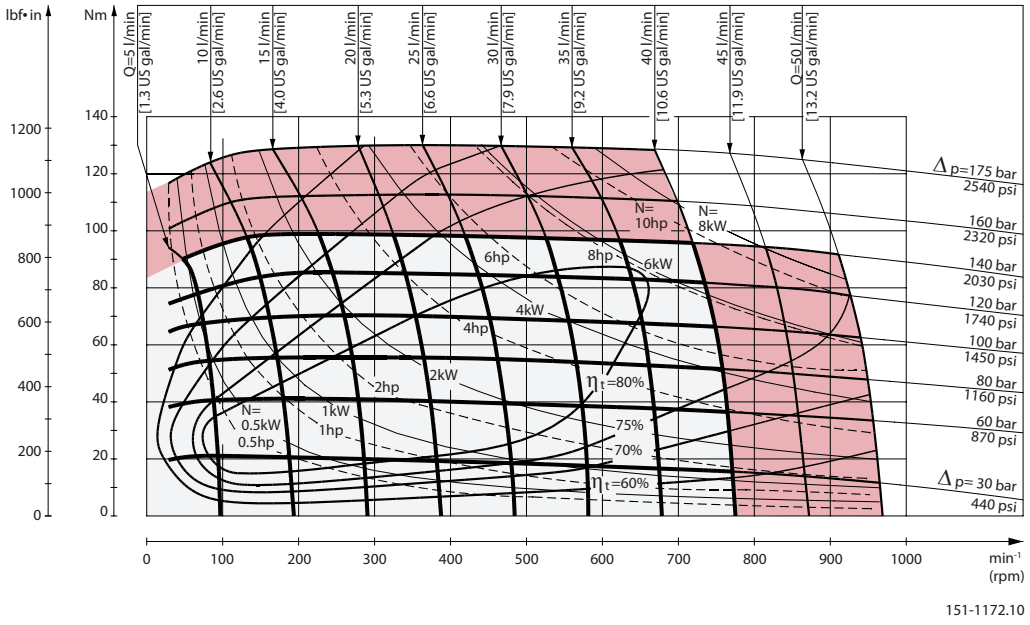
Explanation of function diagram use, basis and conditions can be found in *Speed, torque and output* on page 8.

- Continuous range
- Intermittent range (max. 10% operation every minute)

Max. permissible continuous/intermittent pressure drop for the actual shaft version can be found in *OMR technical data* on page 46.

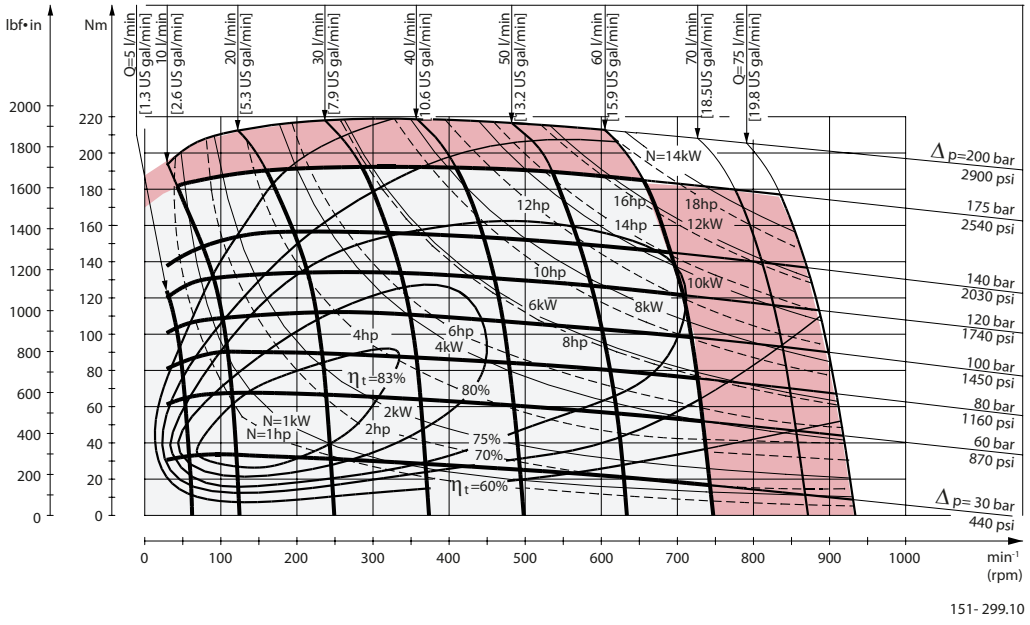
Intermittent pressure drop and oil flow must not occur simultaneously.

OMR 50 function diagram



151-1172.10

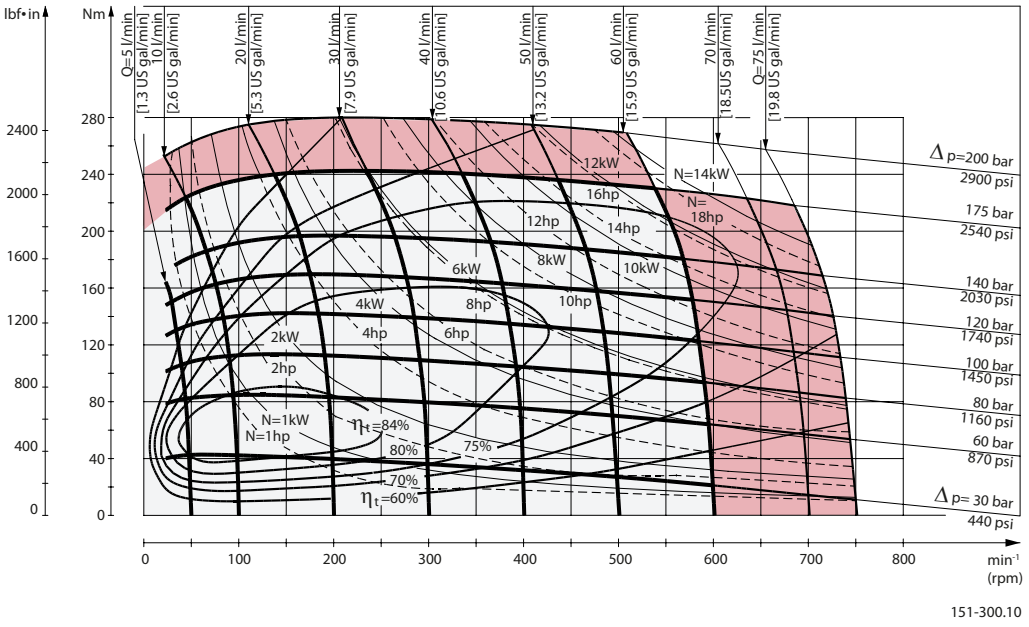
OMR 80 function diagram



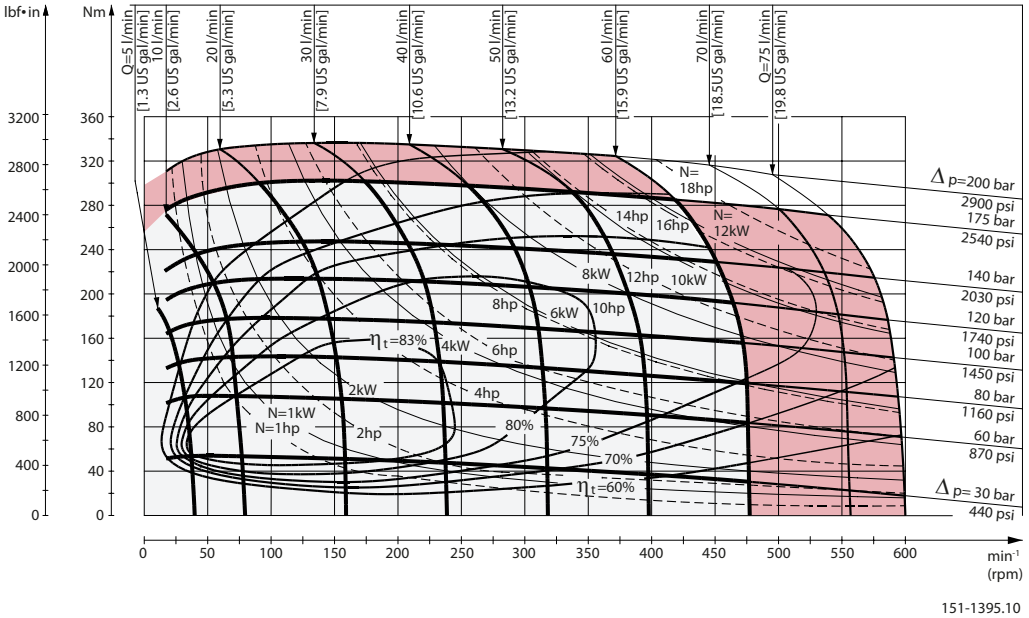
151- 299.10

OMR function diagrams

OMR 100 function diagram

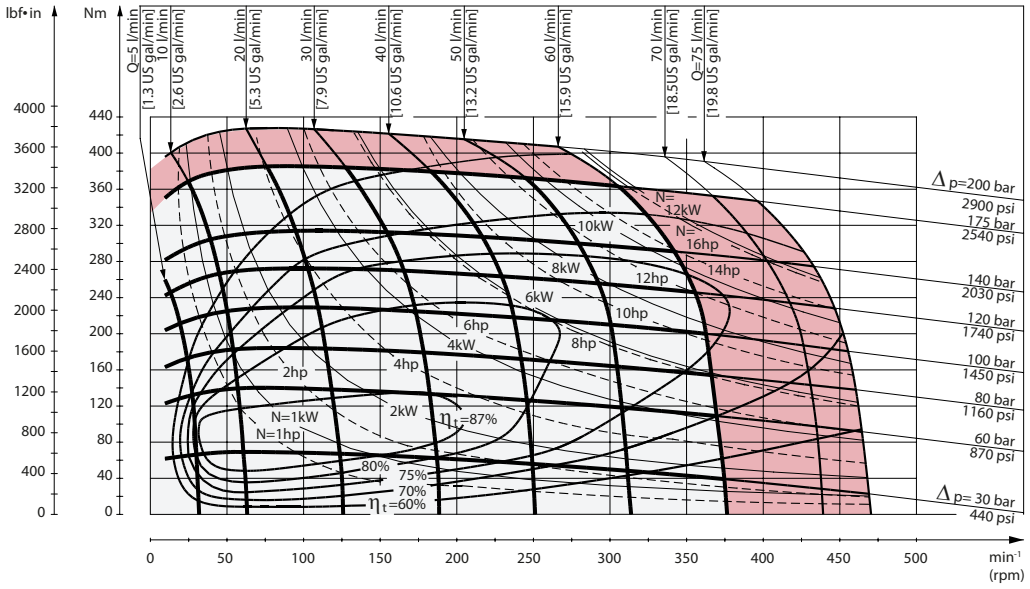


OMR 125 function diagram

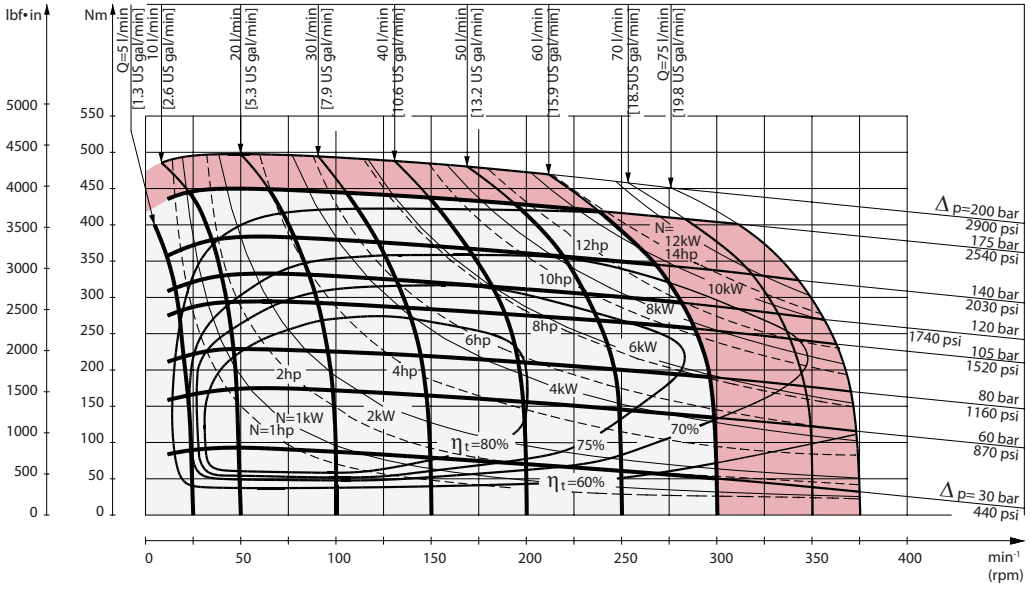


OMR function diagrams

OMR 160 function diagram

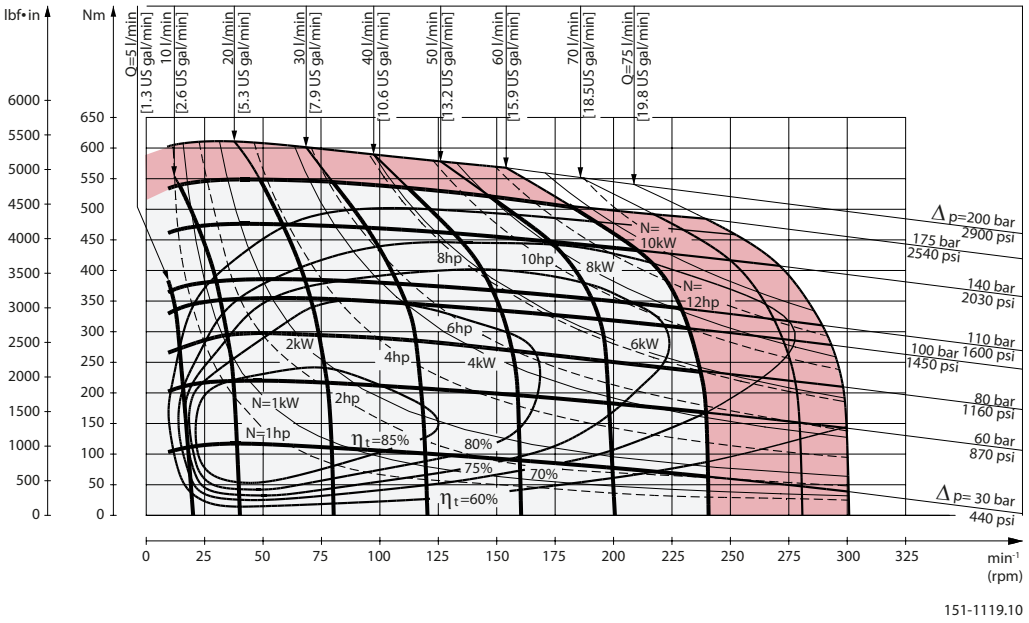


OMR 200 function diagram

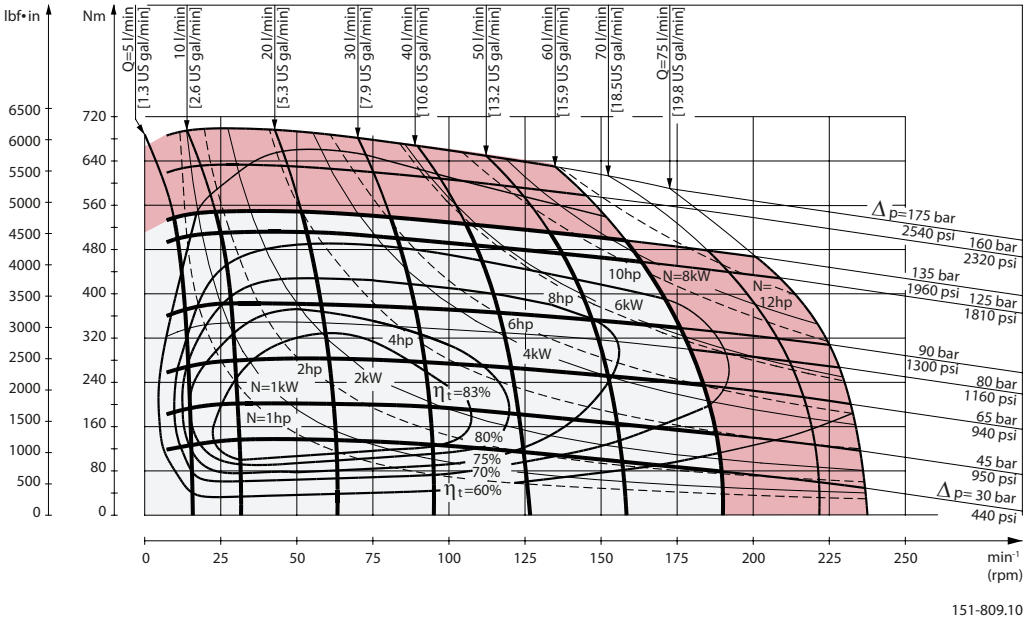


OMR function diagrams

OMR 250 function diagram

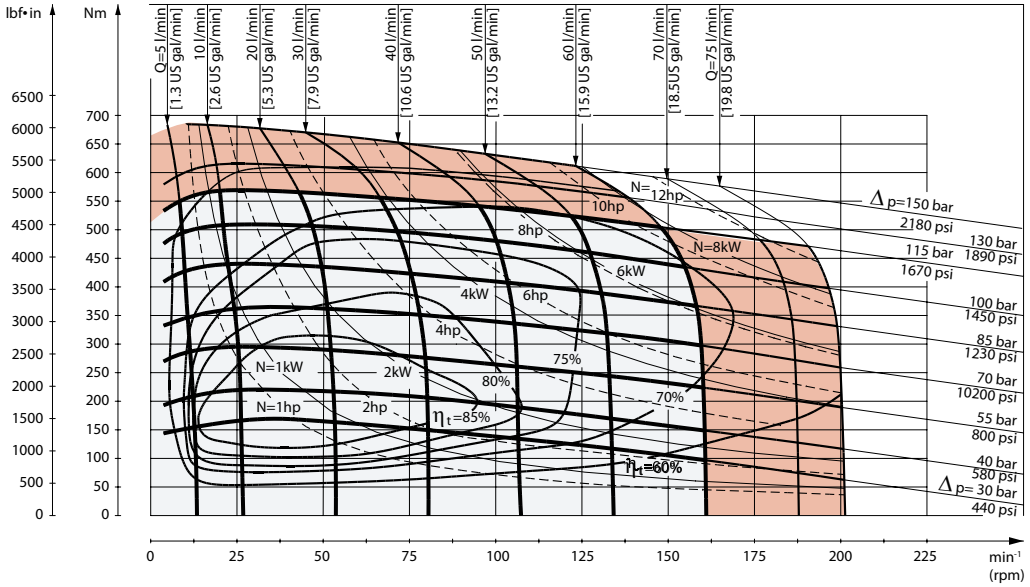


OMR 315 function diagram



OMR function diagrams

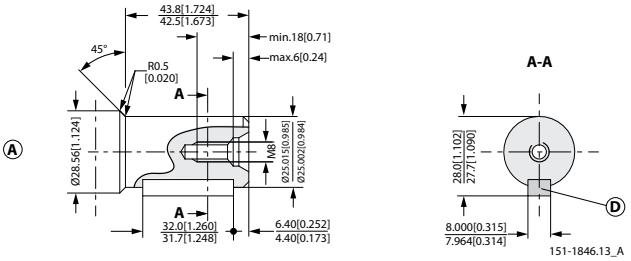
OMR 375 function diagram



151-1385.11

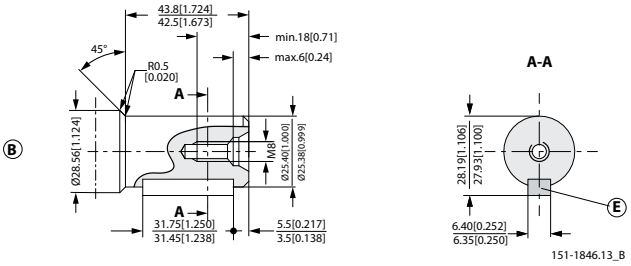
Shaft version

OMR shaft version



A: Cylindrical shaft 25 mm

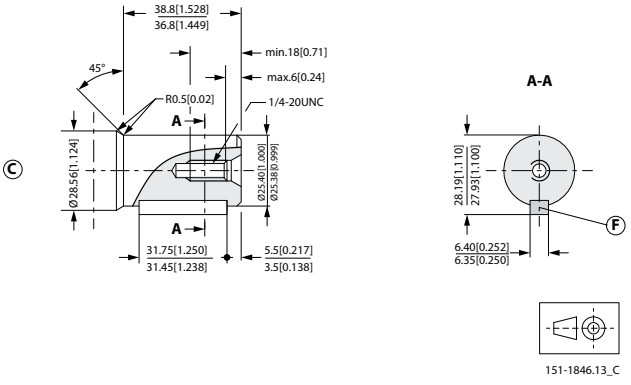
D: Parallel key A8 • 7 • 32 DIN 6885



B: Cylindrical shaft 1 in

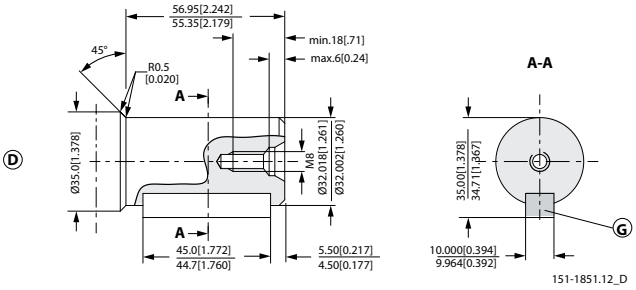
E: Parallel key ¼ • ¼ • 1 ¼ in B.S. 46

US version



C: Cylindrical shaft 1 in

F: Parallel key ¼ • ¼ • 1 ¼ in B.S. 46

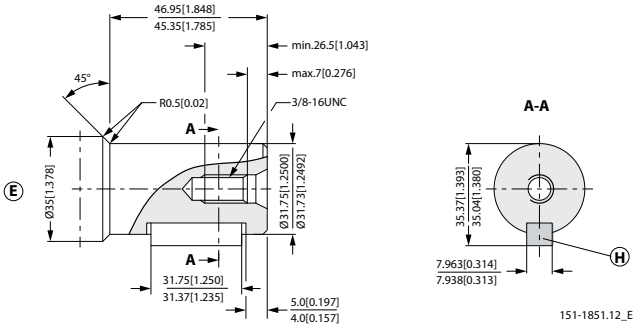


D: Cylindrical shaft 32 mm

G: Parallel key A10 • 8 • 45 DIN 6885

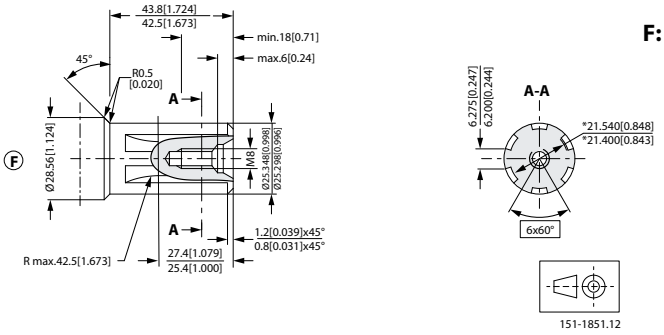
Shaft version

US version



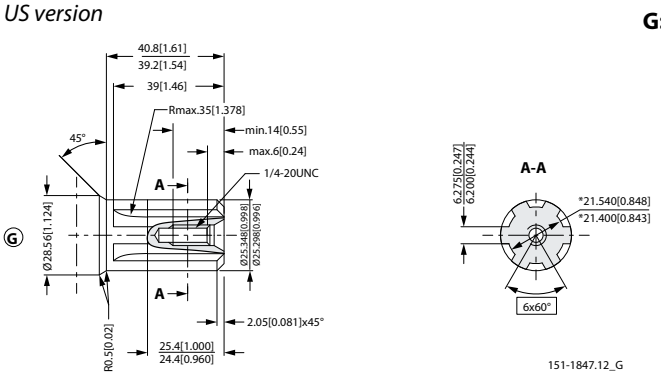
E: Cylindrical shaft 1 ¼ in

H: Parallel key 5/16 5/16 1 ¼ in B.S. 46

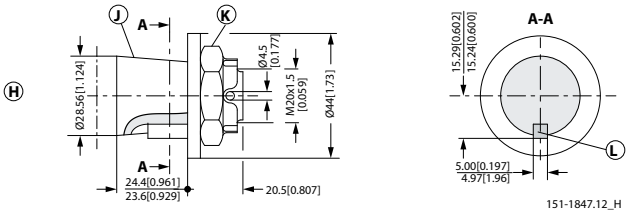


F: Involute splined shaft B.S. 2059 (SAE 6 B) Straight-sided, bottom fitting, deep. Fit 2 Nom. size 1 in *Deviates from B.S. 2059 (SAE 6 B)

US version



G: Splined shaft SAE 6 B (B.S. 2059) Straight-sided, bottom fitting, deep. Fit 2; Nom. size 1 in * Deviates from SAE 6 B (B.S. 2059)



H: Tapered shaft 28.5 mm (ISO/R775)

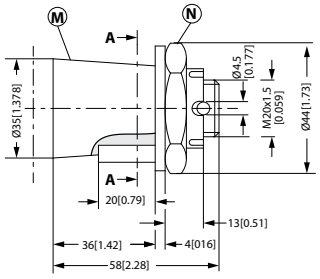
K: DIN 937 NV 30 Tightening torque: 100 ± 10 N•m [885 ± 85 lbf•in]

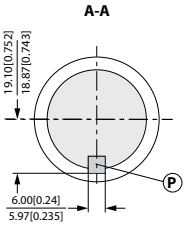
J: Taper 1:10

L: Parallel key B5 • 5 • 14 DIN 6885

Shaft version

Ⓘ





151-1847.12_I

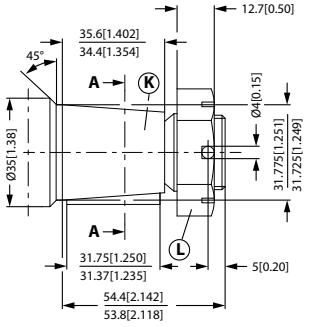
I: Tapered shaft 35 mm

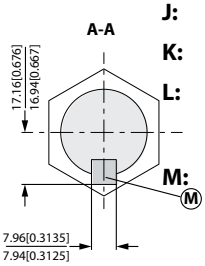
N: DIN 937 NV 41 Tightening torque: 200 ± 10 N•m [1770 ± 85 lbf•in]

M: Taper 1:10

P: Parallel key B6 • 6 • 20 DIN 6885

Ⓙ





151-1848.12

J: Tapered shaft 1 1/4 in

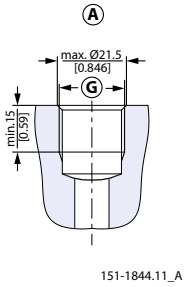
K: Cone 1:8 SAE J501

L: 1 - 20 UNEF Across flats 1 7/16 Tightening torque: 200 ± 10 N•m [1770 ± 85 lbf•in]

M: Parallel key 5/16 • 5/16 • 1 1/4 SAE J501

OMR port thread versions

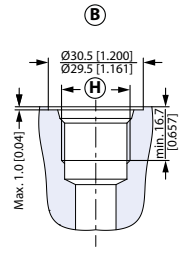
Port thread versions



151-1844.11_A

A: G main ports

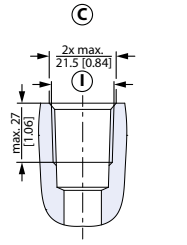
G: ISO 228/1 - G1/2



151-1844.11_B

B: UNF main ports

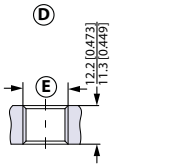
H: 7/8 - 14 UNF O-ring boss port



151-1844.11_C

C: NPTF main ports

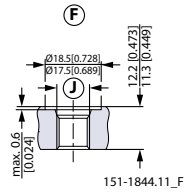
I: 1/2 - 14 NPTF



151-1844.11_D

D: G drain port

E: ISO 228/1 - G1/4



151-1844.11_F

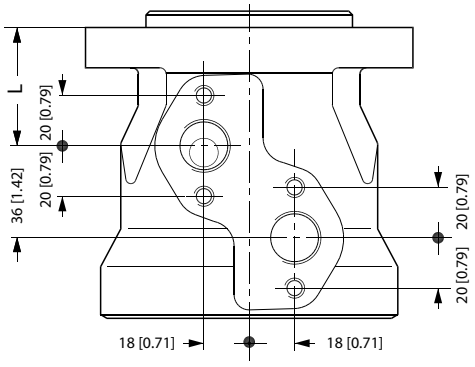
F: UNF drain port

J: 7/16 - 20 UNF O-ring boss port

OMR port thread versions

OMR manifold mount

European version



151-2135.10

L: see dimensional drawing for given OMR motor: *OMR dimensions* on page 65 and *Dimension-US Version*

L: see dimensional drawing for given OMP motor:

OMR dimensions - European version on page 65
OMR dimensions - US version on page 74

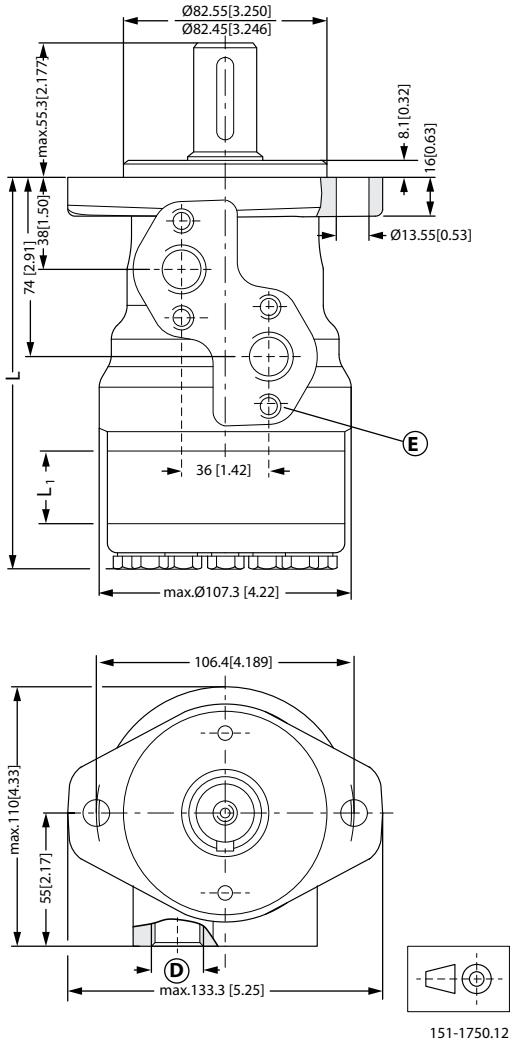
OMR dimensions

OMR dimensions - European version

OMR Side port version with 2-hole oval mounting flange (A2 flange)

- With high pressure shaft seal

Side port - European version



D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep (4 pcs.)

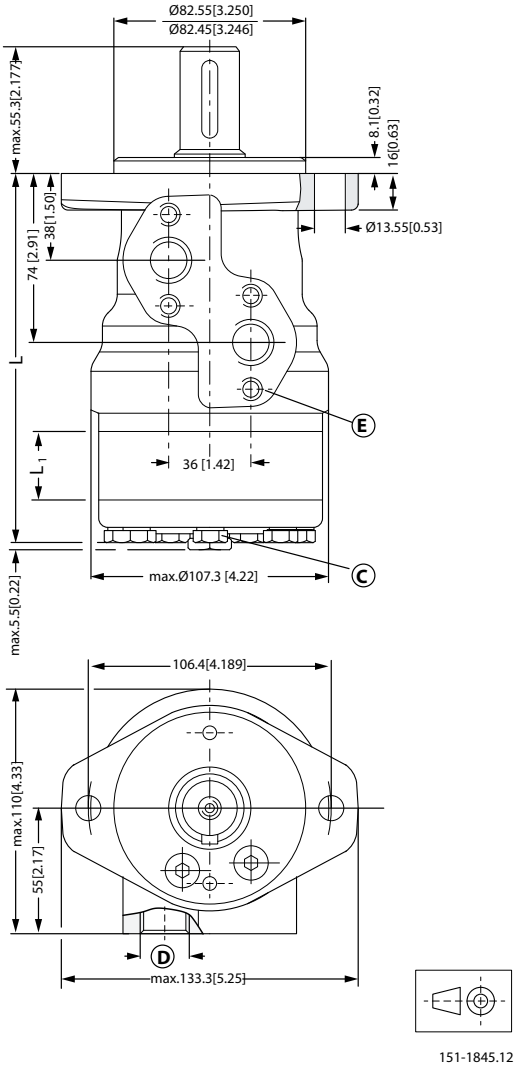
Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{Max}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with 2-hole oval mounting flange (A2 flange)

- With check valves and drain connection
- With high pressure shaft seal

Side port - European version



C: Drain connection G ¼; 15 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

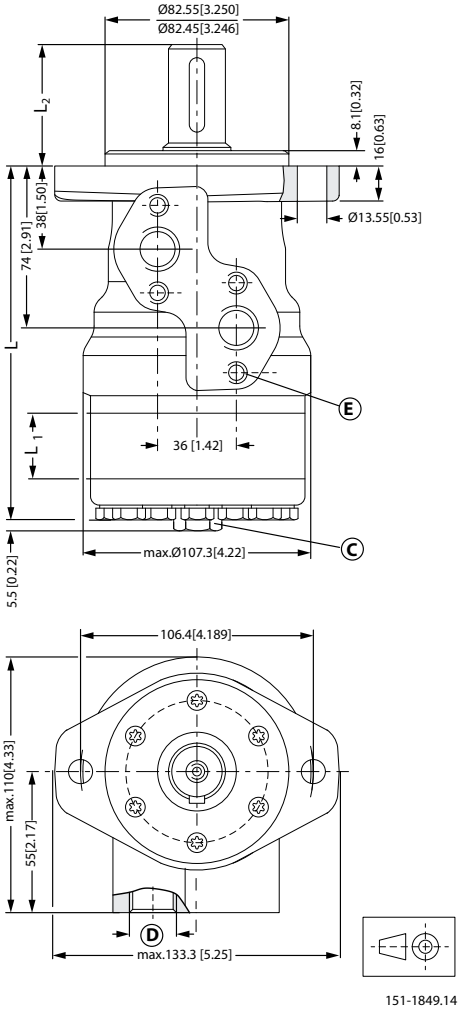
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{MAX}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR, OMR C and OMR N Side port version with 2-hole oval mounting flange (A2 flange)

Side port - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep (4 pcs.)

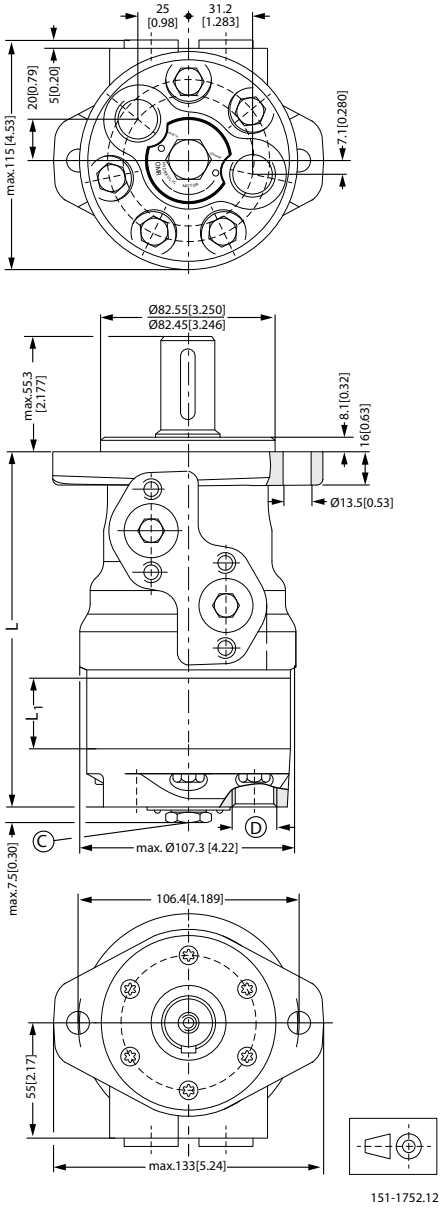
Output shaft. max.		**Cylindrical shaft 32 mm [1.26 in]**	**Cylindrical shaft 25 mm [0.98 in]**	**Tapered shaft 28.56 mm [1.12 in]**
$L_{2\,max}$	mm	68.3	55.3	56.65
	[in]	[2.69]	[2.18]	[2.23]

Type		**OMR 50**	**OMR 80**	**OMR 100**	**OMR 125**	**OMR 160**	**OMR 200**	**OMR 250**	**OMR 315**	**OMR 375**
L_{max}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR End port version with 2-hole oval mounting flange (A2-flange)

End port - European version



C: G ¼; 12 mm [0.47 in] deep

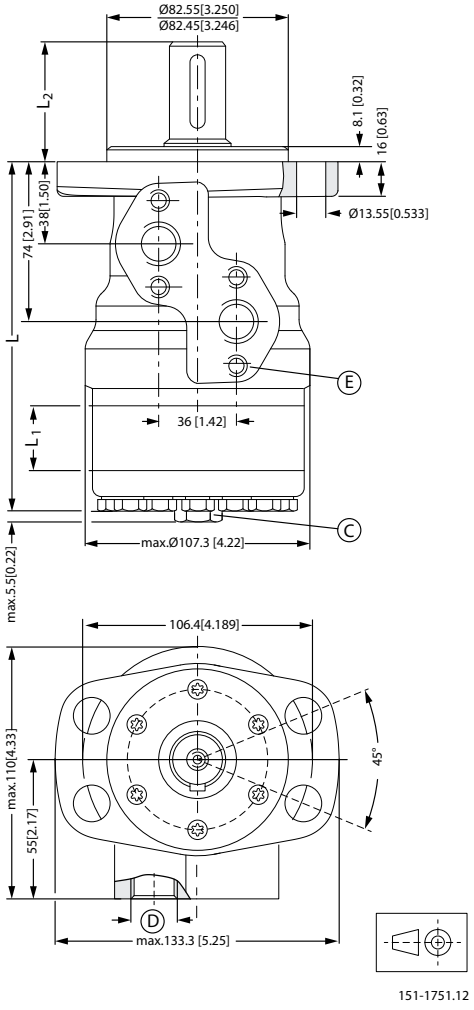
D: G ½; 15 mm [0.59 in] deep

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{Max}	mm	152.2	157.2	160.6	165.0	171.0	178.0	186.7	198.0	208.2
	[in]	[5.99]	[6.19]	[6.32]	[6.50]	[6.73]	[7.01]	[7.35]	[7.80]	[8.20]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with 4-hole oval mounting flange (A4 flange)

Side port - European version



C: Drain connection G ¼; 15 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep (4 pcs.)

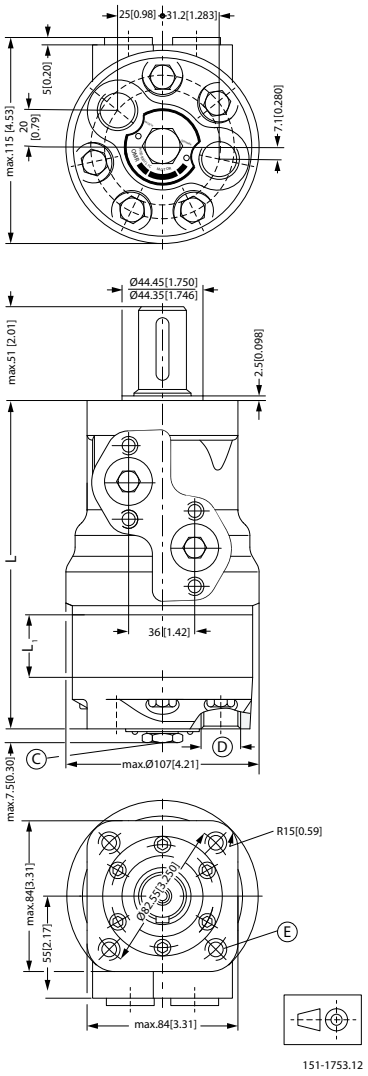
Output shaft.max.		Cylindrical shaft 32 mm [1.26 in]	Cylindrical shaft 25 mm [0.98 in]	Tapered shaft 28.56 mm [1.12 in]
L2	mm	68.3	55.3	56.3
	[in]	[2.69]	[2.18]	[2.22]

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
$L_{Max.}$	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR End port version with square mounting flange (C-flange)

End port - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

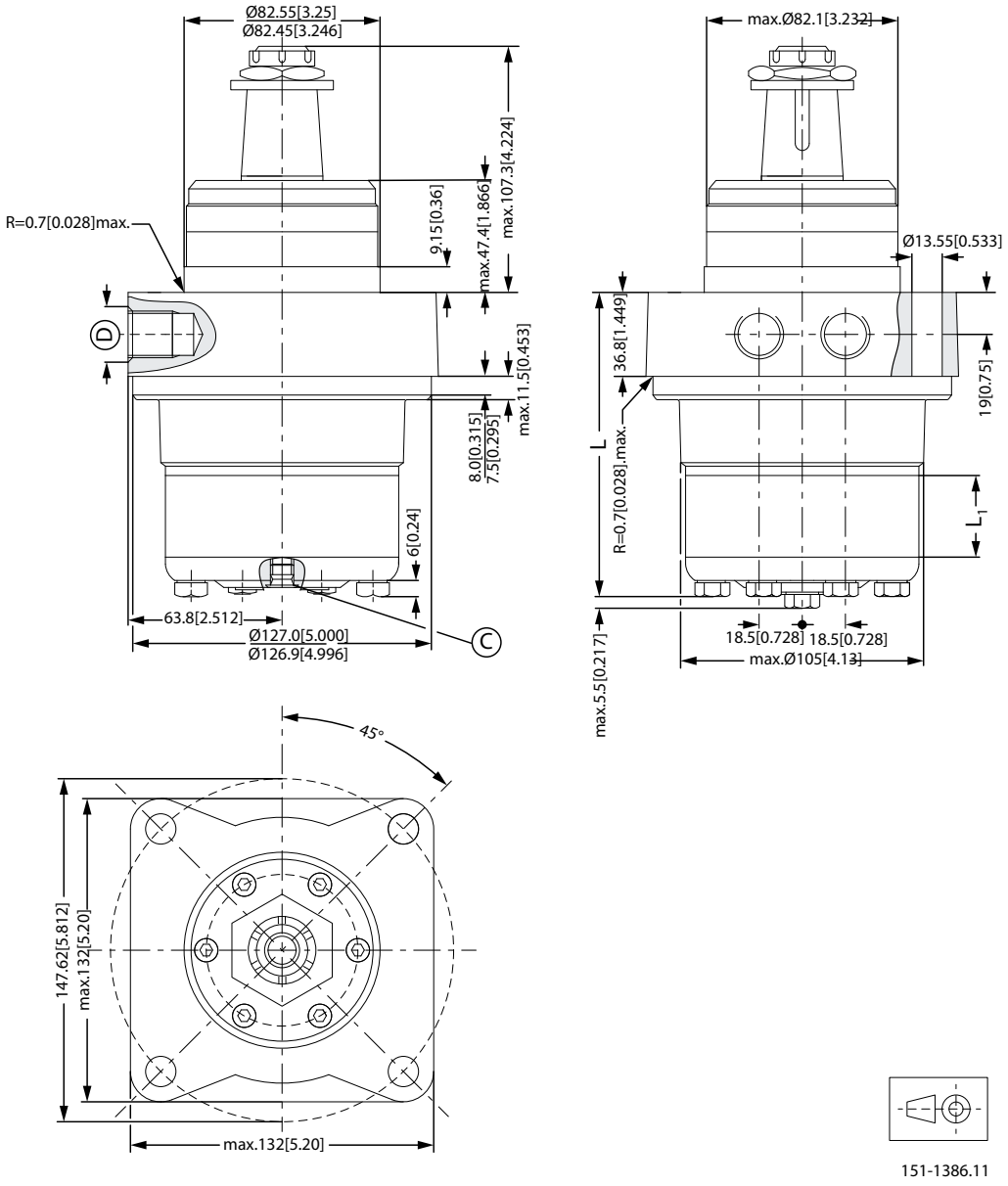
E: M10; 15 mm [0.59 in] deep (4 pcs.)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
$L_{Max.}$	mm	158.6	163.3	167.0	171.0	177.0	184.0	192.7	204.0	214.2
	[in]	[6.24]	[6.44]	[6.57]	[6.73]	[6.97]	[7.24]	[7.24]	[8.03]	[8.43]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMRW N wheel motor

Wheel motor - European version



151-1386.11

C: Drain connection G ¼; 12 mm [0.47 in] deep

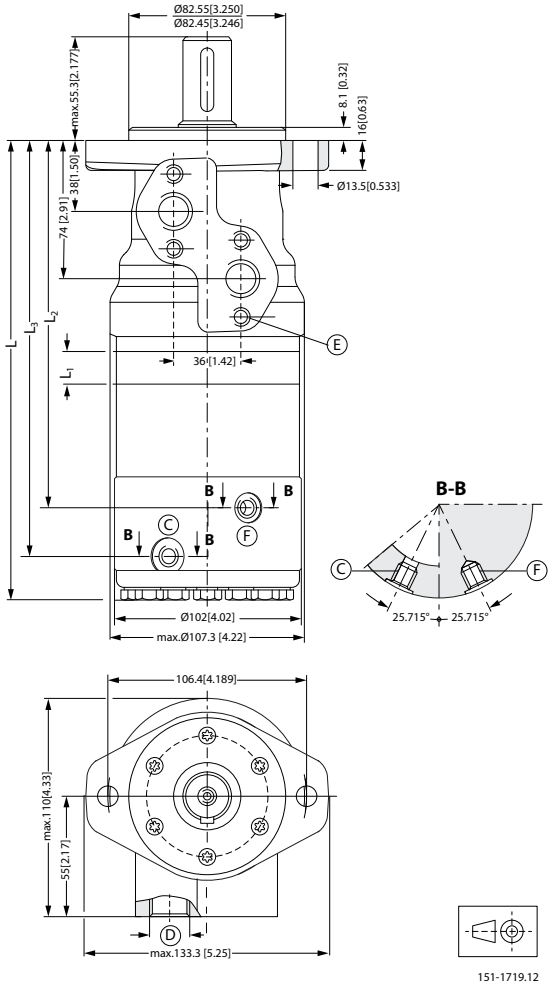
D: G ½; 15 mm [0.59 in] deep

Type		OMRW 50 N	OMRW 80 N	OMRW 100 N	OMRW 125 N	OMRW 160 N	OMRW 200 N	OMRW 250 N	OMRW 315 N	OMRW 375 N
$L_{Max.}$	mm	113.7	114.7	118.1	122.5	128.5	135.1	144.2	155.5	165.7
	[in]	[4.48]	[4.52]	[4.65]	[4.82]	[5.06]	[5.33]	[5.68]	[6.12]	[6.52]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR F motor

F motor - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep

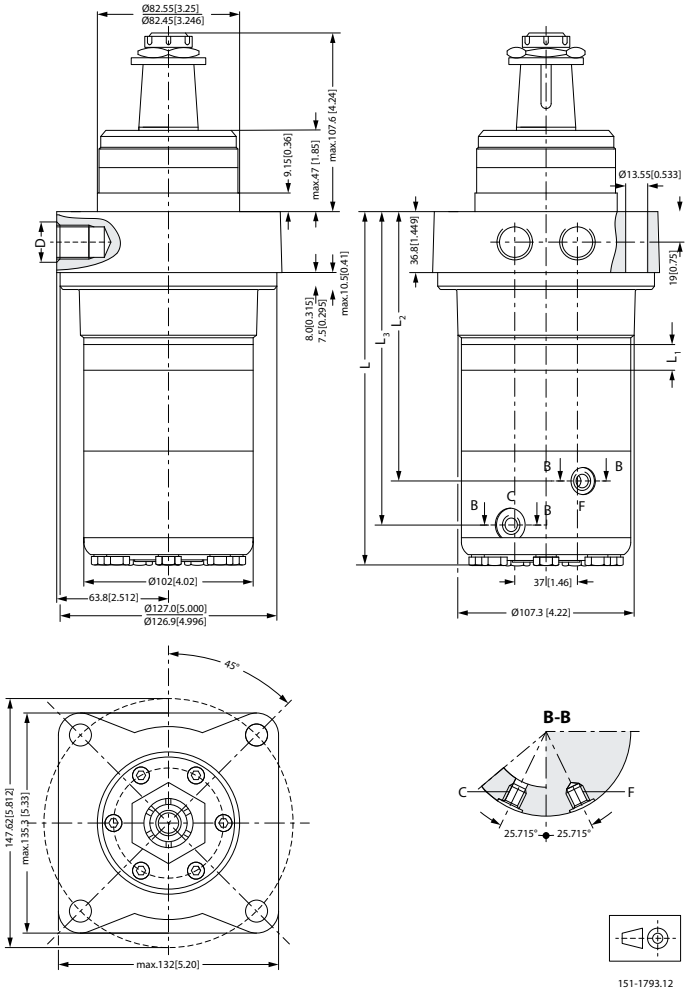
F: Brake release connection G ¼

Type		OMR 80 F	OMR 100 F	OMR 125 F	OMR 160 F	OMR 200 F	OMR 250 F	OMR 315 F	OMR 375 F
$L_{max.}$	mm	242.7	246.1	250.5	265.1	263.5	272.2	283.5	293.7
	[in]	[9.56]	[9.69]	[9.86]	[10.10]	[10.37]	[10.72]	[11.16]	[11.56]
L_1	mm	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]
L_2	mm	186.8	190.2	194.6	200.6	207.6	216.3	227.6	237.7
	[in]	[7.35]	[7.49]	[7.66]	[7.90]	[8.17]	[8.51]	[8.96]	[9.36]
L_3	mm	210.3	213.7	218.1	224.1	231.1	239.8	251.1	261.2
	[in]	[8.28]	[8.41]	[8.58]	[8.82]	[9.10]	[9.45]	[9.88]	[10.28]

OMR dimensions

OMRW NF motor

NF motor - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep

F: Brake release connection G ¼

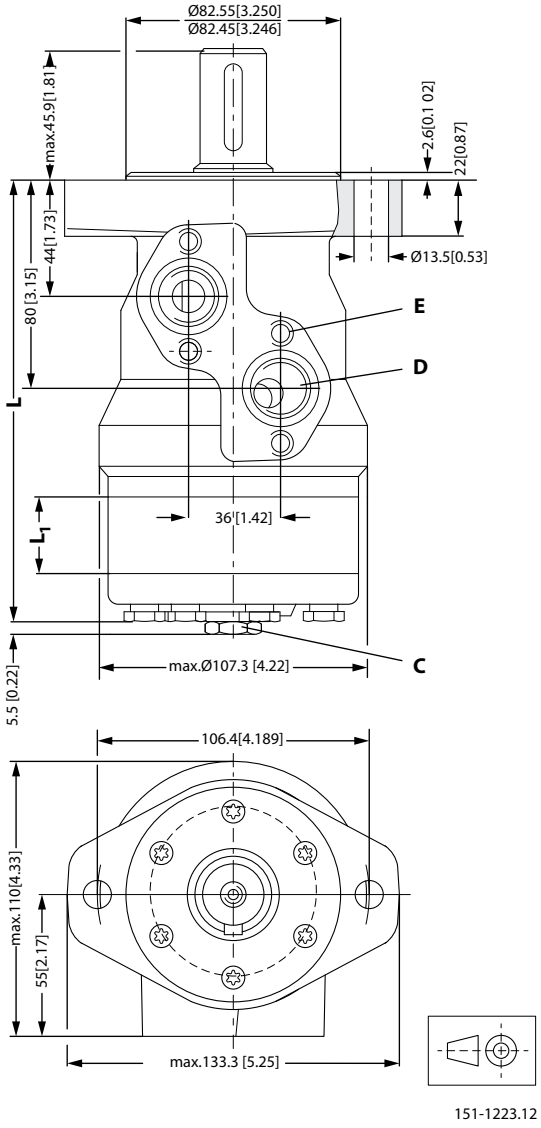
Type		OMRW 80 NF	OMRW 100 NF	OMRW 125 NF	OMRW 160 NF	OMRW 200 NF	OMRW 250 NF	OMRW 315 NF	OMRW 375 NF
$L_{max.}$	mm	213.2	218.0	222.4	228.4	235.4	242.7	254.0	264.2
	[in]	[8.39]	[8.58]	[8.76]	[8.99]	[9.27]	[9.56]	[10.0]	[10.40]
L_1	mm	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]
$L_{2\ max}$	mm	159.2	161.9	166.3	172.3	179.3	188.7	200.0	210.2
	[in]	[6.27]	[6.37]	[6.55]	[6.78]	[7.06]	[7.43]	[7.87]	[8.28]
L_3	mm	182.7	185.4	189.8	195.8	202.8	212.2	223.5	233.7
	[in]	[7.19]	[7.30]	[7.47]	[7.71]	[7.98]	[8.35]	[8.80]	[9.20]

OMR dimensions

OMR dimensions - US version

OMR Side port version with 2-hole oval mounting flange (A2-flange)

Side port - US version



C: Drain connection 7/16 - 20 mm UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 16.76 mm [0.66 in] deep

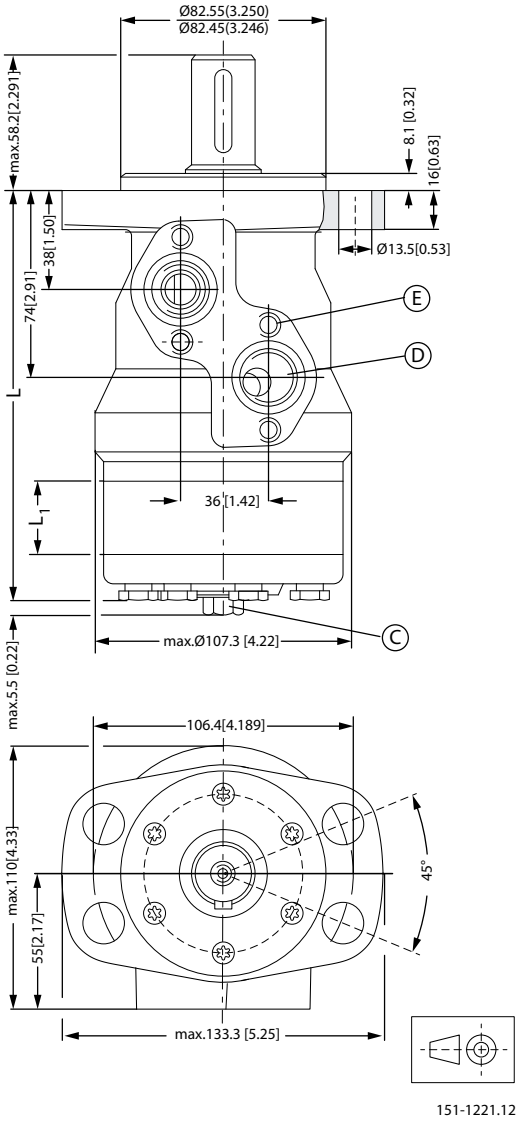
E: M8; 13 mm [0.51 in) deep (4-off)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	143.7	148.7	152.1	156.5	162.5	169.5	178.2	189.5	199.7
	[in]	[5.66]	[5.85]	[5.99]	[6.16]	[6.40]	[6.67]	[7.02]	[7.46]	[7.86]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	64.8
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with 4-hole oval mounting flange (A4-flange)

Side port - US version



C: Drain connection 7/16 - 20 UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 17 mm [0.66 in] deep

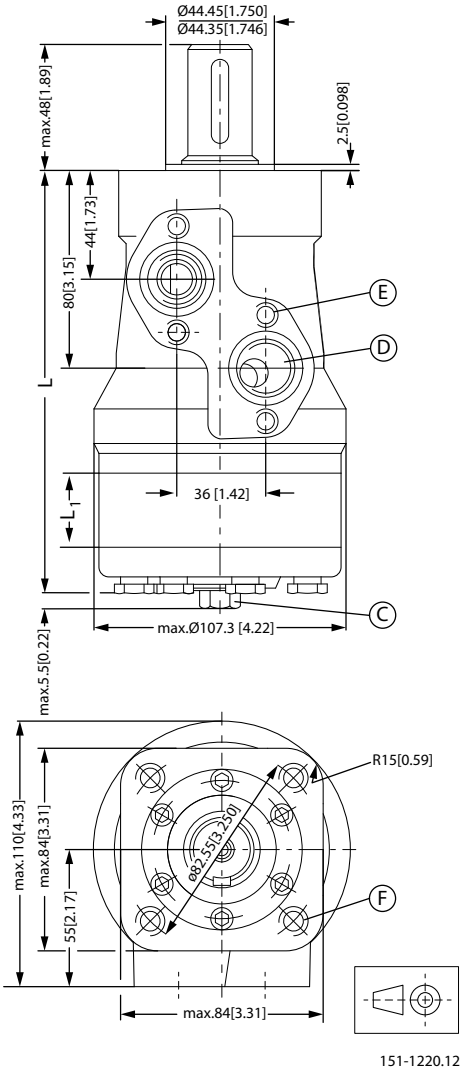
E: M8; 13 mm [0.51 in] deep (4-off)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with square mounting flange (C-flange)

Side port - US version



C: Drain connection 7/16 - 20 mm UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 17 mm [0.66 in] deep

E: M8; 13 mm [0.51 in) deep (4-off)

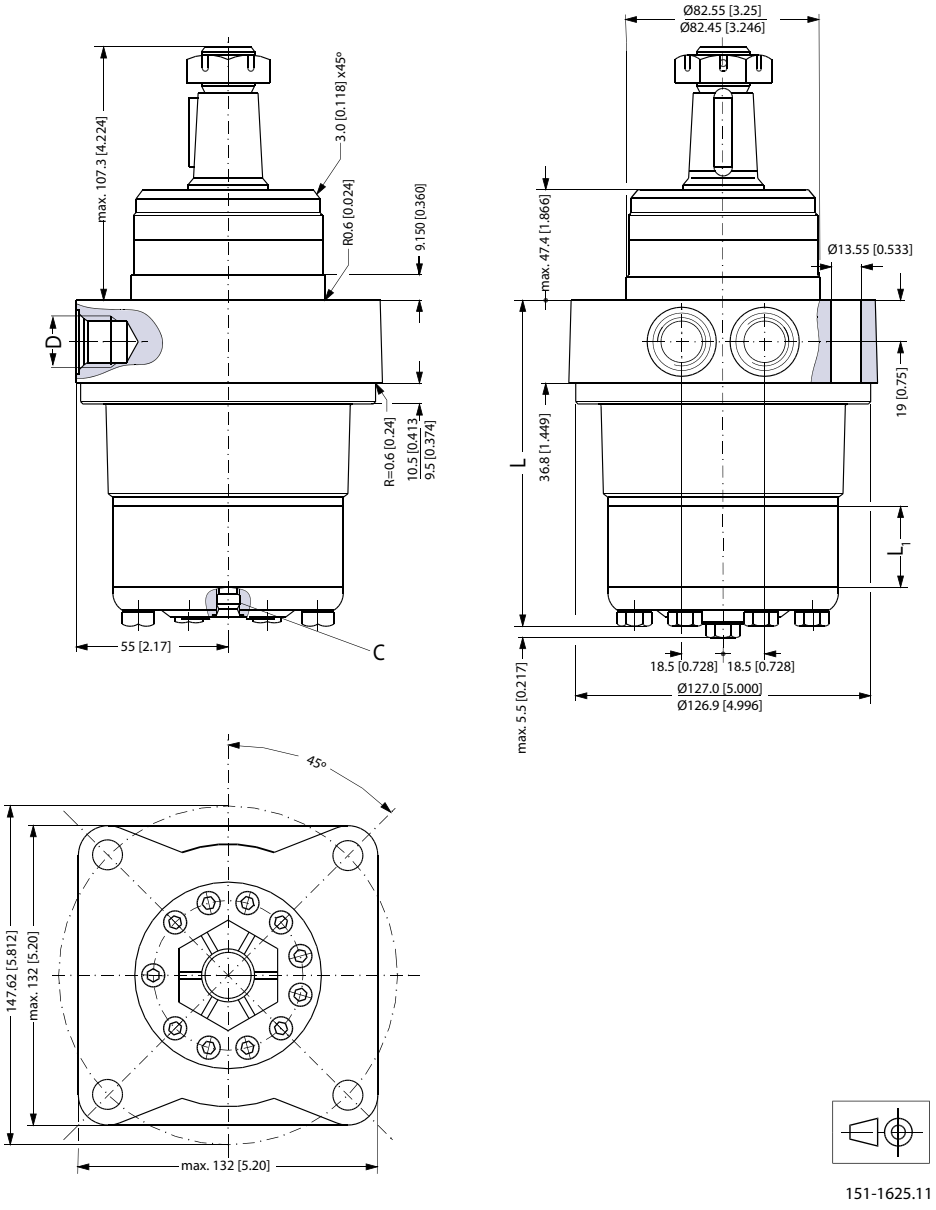
F: 3/8 - 16 UNC; 15 mm [0.59 in] deep (4-off)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	143.8	148.8	152.2	156.6	162.6	169.6	178.3	189.6	199.8
	[in]	[5.66]	[5.86]	[5.99]	[6.17]	[6.40]	[6.68]	[7.02]	[7.46]	[7.87]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMRW N wheel motor

Wheel motor - US version



C: Drain connection 7/16 - 20 UNF; 12 mm [0.47 in] deep

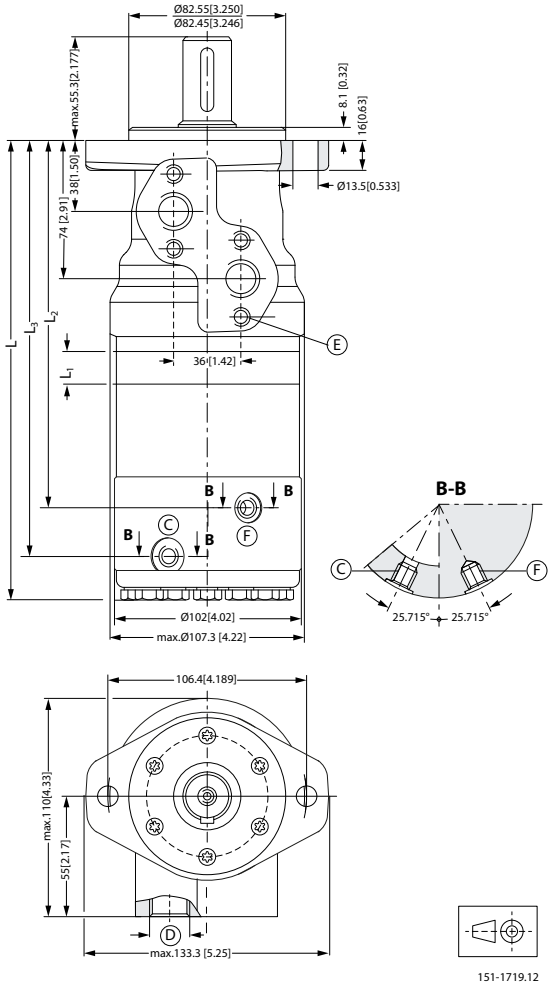
D: 7/8 - 14 UNF; 17 mm [0.66 in] deep

Type		OMRW 50 N	OMRW 80 N	OMRW 100 N	OMRW 125 N	OMRW 160 N	OMRW 200 N	OMRW 250 N	OMRW 315 N	OMRW 375 N
L_{max}	mm	113.7	114.7	118.1	122.5	128.5	135.1	144.2	155.5	165.7
	[in]	[4.48]	[4.52]	[4.65]	[4.82]	[5.06]	[5.33]	[5.68]	[6.12]	[6.52]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR NF motor

NF motor - US version



C: Drain connection 7/16 - 20 UNF

D: 7/8 -14 UNF, 0.66 in (15 mm) deep

E: M8; 0.51 in (13 mm) deep

F: Brake release connection 7/16 - 20 UNF

Type		OMR 80 NF	OMR 100 NF	OMR 125 NF	OMR 160 NF	OMR 200 NF	OMR 250 NF	OMR 315 NF	OMR 375 NF
L_{max}	mm	248.7	252.1	256.5	262.5	269.5	278.2	289.5	299.7
	[in]	[9.79]	[9.93]	[10.10]	[10.33]	[10.61]	[10.95]	[11.40]	[11.80]
L_1	mm	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]
L_2	mm	186.8	195.2	200.6	206.6	213.6	222.3	233.6	243.7
	[in]	[7.35]	[7.72]	[7.90]	[8.13]	[8.41]	[8.75]	[9.19]	[9.59]
L_3	mm	216.3	213.7	224.1	230.1	237.1	245.8	257.1	267.2
	[in]	[8.51]	[8.41]	[8.82]	[9.06]	[9.33]	[9.68]	[10.12]	[10.52]

OMH versions and code numbers

OMH versions and code numbers

OMH standard motors

Mounting flange: 4 hole oval flange (A4))

Spigot diamer	**Ø82.5 mm [3.25 in]**							
Bolt circle diameter	**Ø106.4 mm [4.20 in]**							
Shaft	**Main port size**	**Port style**	**Drain port size**	**Standard shaft seal**	**High pressure shaft seal**	**Check valve**	**Main type designation**	**Conf. code**
Cyl. Ø32 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMH	***A1***
Cyl. Ø35 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMH	***A2***
Cyl. 1 1/4 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMH	***A3***
Splined 1 in (SAE 6B)	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMH	***A4***
Splined 1 1/4 in	G 1/2	Side port	G 1/4	Yes	-	Yes	OMH	***A5***
Splined 1 1/4 in	7/8-14 UNF	Side port	7/16-20 UNF	Yes	-	Yes	OMH	***A6***
Tap. Ø35 mm	G 1/2	Side port	G 1/4	Yes	-	Yes	OMH	***A7***

Code numbers

Conf. code	**Displacement**				
	200	**250**	**315**	**400**	**500**
A1	151H1002	151H1003	151H1004	151H1005	151H1006
A2	151H1012	151H1013	151H1014	151H1015	151H1016
A3	151H1042	151H1043	151H1044	151H1045	151H1046
A4	151H1080	151H1082	151H1083	151H1084	151H1081
A5	151H1022	151H1023	151H1024	151H1025	151H1026
A6	151H1052	151H1053	151H1054	151H1055	151H1056
A7	-	-	151H1034	151H1035	151H1036

OMH technical data

Technical data for OMH with 1 in SAE 6 B splined shaft

Type			OMH	OMH	OMH	OMH	OMH
Motor size			**200**	**250**	**315**	**400**	**500**
Geometric displacement	cm^3 [inch]		201.3 [12.32]	252.0 [15.42]	314.9 [19.27]	396.8 [24.28]	470.6 [28.80]
Max. speed	min^{-1}	cont.	370	295	235	185	155
	[rpm]	int.[1)]	445	350	285	225	190
Max. torque	N•m [lbf•in]	cont.	340 [3000]	340 [3000]	340 [3000]	340 [3000]	340 [3000]
		int.[1)]	510 [4500]	510 [4500]	540 [4800]	540 [4800]	520 [4600]
		peak[2)]	610 [5400]	610 [5400]	610 [5400]	610 [5400]	610 [5400]
Max. output	kW [hp]	cont.	11.2 [15.0]	7.5 [10.0]	5.2 [7.0]	4.8 [6.5]	3.7 [5.0]
		int.[1)]	17.2 [23.0]	11.9 [16.0]	9.7 [13.0]	8.2 [11.0]	6.0 [8.0]
Max. pressure drop	bar [psi]	cont.	115 [1650]	90 [1300]	75 [1100]	60 [900]	50 [725]
		int.[1)]	170 [2500]	145 [2100]	120 [1750]	95 [1400]	75 [1100]
		peak[2)]	215 [3120]	175 [2540]	145 [2100]	110 [1600]	90 [1300]
Max. oil flow	l/min [US gal/min]	cont.	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
		int.[1)]	90 [23.8]	90 [23.8]	90 [23.8]	90 [23.8]	90 [23.8]
Max. starting pressure with unloaded shaft	bar [psi]		7 [100]	7 [100]	7 [100]	7 [100]	7 [100]
Min starting torque	at max. press drop cont. N•m [lbf•in]		255 [2250]	270 [2400]	280 [2500]	290 [2550]	300 [2650]
	at max. press.drop int.[1)] N•m [lbf•in]		390 [3450]	435 [3850]	450 [4000]	450 [4000]	450 [4000]

[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

Technical data for OMH with 32 mm and 1 1/4 in cylindrical shaft

Type			OMH	OMH	OMH	OMH	OMH
Motor size			**200**	**250**	**315**	**400**	**500**
Geometric displacement	cm^3 [inch]		201.3 [12.32]	252.0 [15.42]	314.9 [19.27]	396.8 [24.28]	470.6 [28.80]
Max. speed	min^{-1}	cont.	370	295	235	185	155
	[rpm]	int.[1)]	445	350	285	225	190

OMH technical data

Type			OMH	OMH	OMH	OMH	OMH
Motor size			**200**	**250**	**315**	**400**	**500**
Max. torque	N•m [lbf•in]	cont.	510 [4500]	610 [5400}	590 [5220]	590 [5220]	580 [5130]
		int.[1)]	580 [5130]	700 [6200]	670 [5930]	700 [6200]	680 [6020]
		peak[2)]	640 [5660]	790 [6990]	840 [7440]	840 [7440]	840 [7440]
Max. output	kW [hp]	cont.	16.0 [21.5]	16.0 [21.5]	12.5 [16.8]	10.0 [13.4]	8.5 [11.4]
		int.[1)]	18.5 [24.8]	18.5 [24.8]	14.0 [18.8]	12.0 [16.1]	10.0 [13.4]
Max. pressure drop	bar [psi]	cont.	175 [2540]	175 [2540]	135 [1960]	105 [1520]	85 [1230]
		int.[1)]	200 [2900]	200 [2900]	155 [2250]	125 [1810]	100 [1450]
		peak[2)]	225 [3260]	225 [3260]	190 [2760]	155 [2250]	130 [1890]
Max. oil flow	l/min [US gal/min]	cont.	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
		int.[1)]	90 [23.8]	90 [23.8]	90 [23.8]	90 [23.8]	90 [23.8]
Max. starting pressure with unloaded shaft	bar [psi]		7 [100]	7 [100]	7 [100]	7 [100]	7 [100]
Min starting torque	at max. press drop cont. N•m [lbf•in]		390 [3450]	520 [4600]	510 [4510]	490 [4340]	490 [4340]
	at max. press.drop int.[1)] N•m [lbf•in]		450 [3980]	590 [5220]	590 [5220]	600 [5310]	600 [5310]

[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

Technical data for OMH with 35 mm cylindrical, 1 1/4 in splined and 35 mm tapered shaft

Type			OMH	OMH	OMH	OMH	OMH
Motor size			**200**	**250**	**315**	**400**	**500**
Geometric displacement	cm^3 [inch]		201.3 [12.32]	252.0 [15.42]	314.9 [19.27]	396.8 [24.28]	470.6 [28.80]
Max. speed	min^{-1}	cont.	370	295	235	185	155
	[rpm]	int.[fn]	445	350	285	225	190
Max. torque	N•m [lbf•in]	cont.	510 [4500]	610 [5400}	740 [6550]	840 [7440]	820 [7260]
		int.[fn]	580 [5130]	700 [6200]	820 [7260]	980 [8670]	1040 [9210]
		peak[2)]	640 [5660]	790 [6990]	980 [8670]	1090 [9650]	1170 [10360]
Max. output	kW [hp]	cont.	16.0 [21.5]	16.0 [21.5]	14.0 [18.8]	12.5 [16.8]	11.0 [14.8]
		int.[fn]	18.5 [24.8]	18.5 [24.8]	15.5 [20.8	15.0 [20.1]	14.0 [18.8]

OMH technical data

Type			OMH	OMH	OMH	OMH	OMH
Motor size			**200**	**250**	**315**	**400**	**500**
Max. pressure drop	bar [psi]	cont.	175 [2540]	175 [2540]	175 [2540]	155 [2250]	125 [1810]
		int.[fn]	200 [2900]	200 [2900]	200 [2900]	190 [2760]	160 [2320]
		peak[2)]	225 [3260]	225 [3260]	225 [3260]	210 [3050]	180 [2610]
Max. oil flow	l/min [US gal/min]	cont.	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
		int.[fn]	90 [23.8]	90 [23.8]	90 [23.8]	90 [23.8]	90 [23.8]
Max. starting pressure with unloaded shaft	bar [psi]		7 [100]	7 [100]	7 [100]	7 [100]	7 [100]
Min starting torque	at max. press drop cont. N•m [lbf•in]		390 [3450]	520 [4600]	660 [5840]	720 [6370]	720 [6370]
	at max. press.drop int.[fn] N•m [lbf•in]		450 [3980]	590 [5220]	730 [6460]	880 [7790]	880 [7790]

[fn] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

Type		Max. inlet pressure	Max.return pressure with drain line
OMH 200 - 500	bar [psi] cont	200 [2900]	175 [2540]
	bar int.[1)] [psi]	225 [3260]	200 [2900]
	bar peak [2)] [psi]	250 [3630]	225 [3260]

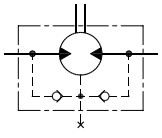
[1)] Intermittent operation: the permissible values may occur for max. 10% of every minute.

[2)] Peak load: the permissible values may occur for max. 1% of every minute.

Max. Permissible Shaft Seal Pressure

OMH with standard shaft seal, check valves and without use of drain connection:

The pressure on the shaft seal never exceeds the pressure in the return line

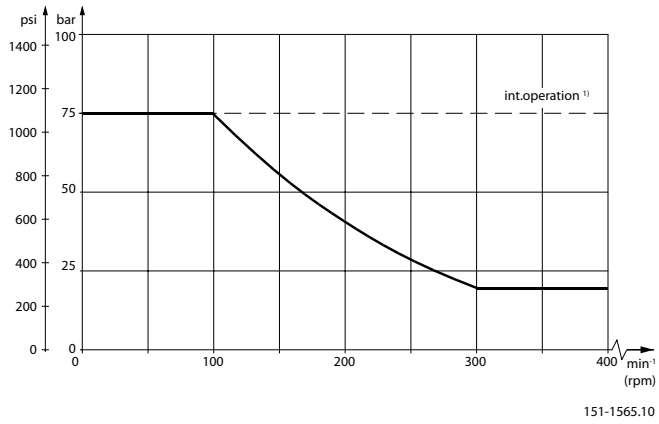


OMH with standard shaft seal, check valves and with drain connection:

The shaft seal pressure equals the pressure on the drain line.

OMH technical data

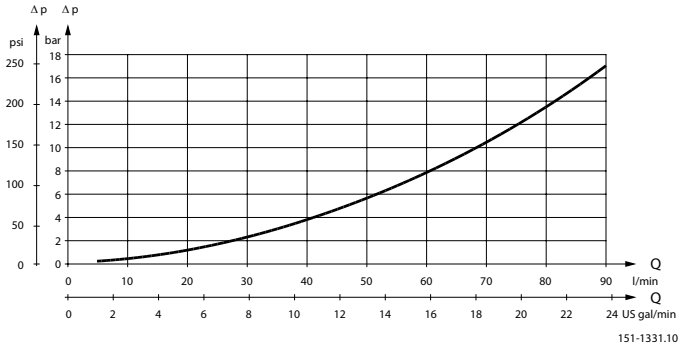
Max. return pressure without drain line or max. pressure in the drain line



1) Intermittent operation: the permissible values may occur for max. 10% of every minute.

Pressure Drop in Motor

The curve applies to an unloaded motor shaft and an oil viscosity of 35 mm²/s [165 SUS]

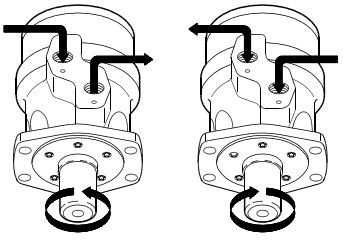


Oil Flow in Drain Line

The table shows the max. oil flow in the drain line at a return pressure less than 5-10 bar [75-150 psi].

Pressure drop bar [psi]	Viscosity		Oil flow in drain line	
	mm²/s	[SUS]	l/min	[US gal/min]
100 [1450]	20	[100]	2.5	[0.66]
	35	[165]	1.8	[0.78]
140 [2030]	20	[100]	3.5	[0.93]
	35	[165]	2.8	[0.74]

Direction of Shaft Rotation



OMH technical data

Permissible Shaft Loads for OMH

The permissible shaft load (Prad) is calculated from the speed (n) and the distance (l) between the point of load application and the mounting flange.

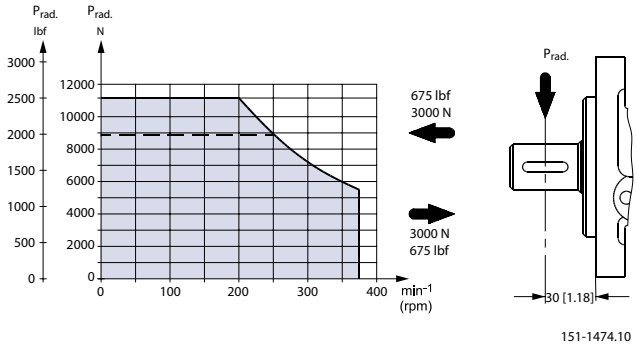
$$P_{rad} = \frac{1100}{n} \cdot \frac{250000}{103.5 + l} \quad N^*;\ l \text{ in mm}$$

$$P_{rad} = \frac{1100}{n} \cdot \frac{2215}{4.07 + l} \quad lbf^*;\ l \text{ in inch}$$

*n > 200 min^{-1} (rpm); l < 60 mm [2.36 in]

n < 200 min^{-1} (rpm); => PRmax = 11000 N [2475 lbf]

------ *1 in SAE 6B splined shaft*



The drawing shows the permissible radial load when l = 30 mm [1.18 in].

OMH function diagrams

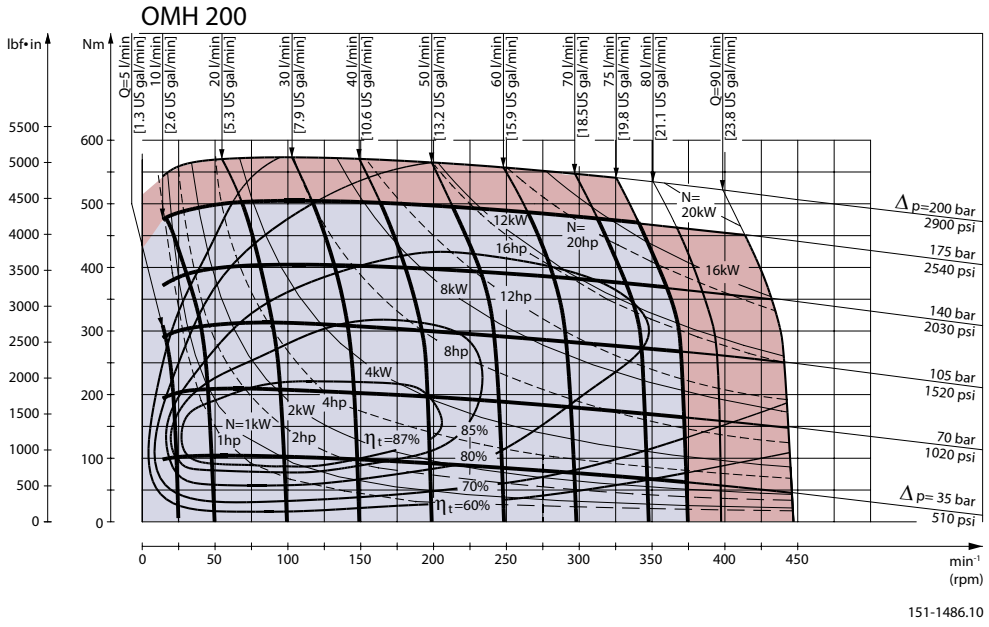
Explanation of function diagram use, basis and conditions can be found in *Speed, torque and output* on page 8.

- Continuous range
- Intermittent range (max. 10% operation every minute)

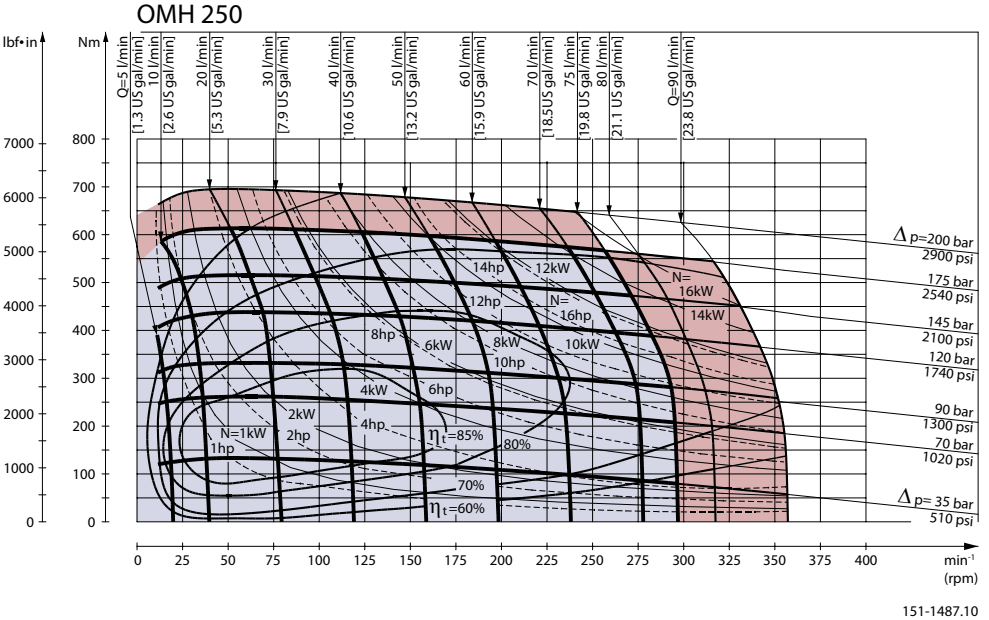
Max. permissible continuous/intermittent pressure drop for the actual shaft version can be found in *OMH technical data* on page 80.

Intermittent pressure drop and oil flow must not occur simultaneously.

OMH 200 function diagram

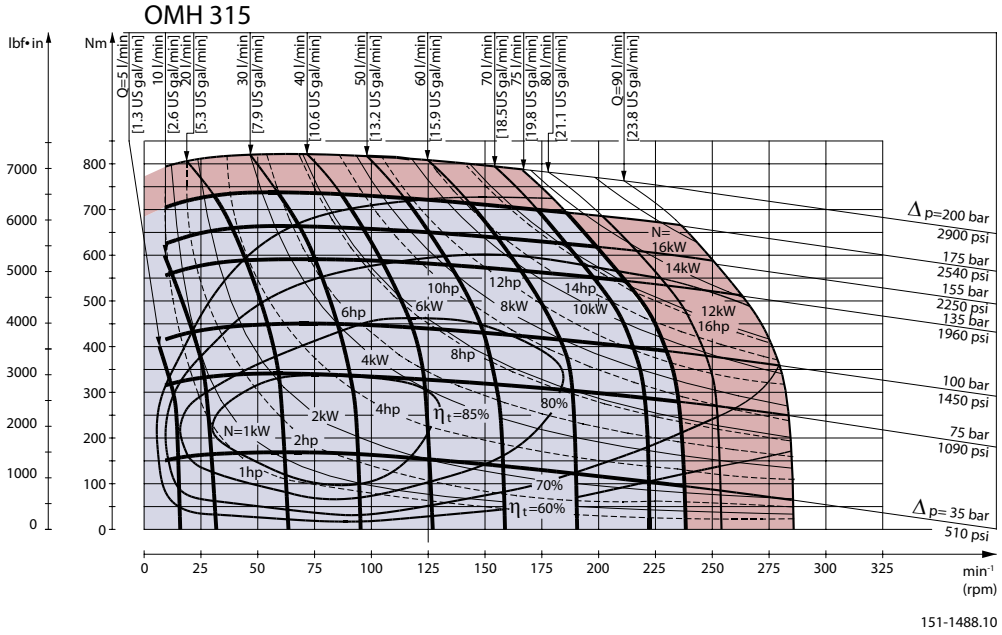


OMH 250 function diagram

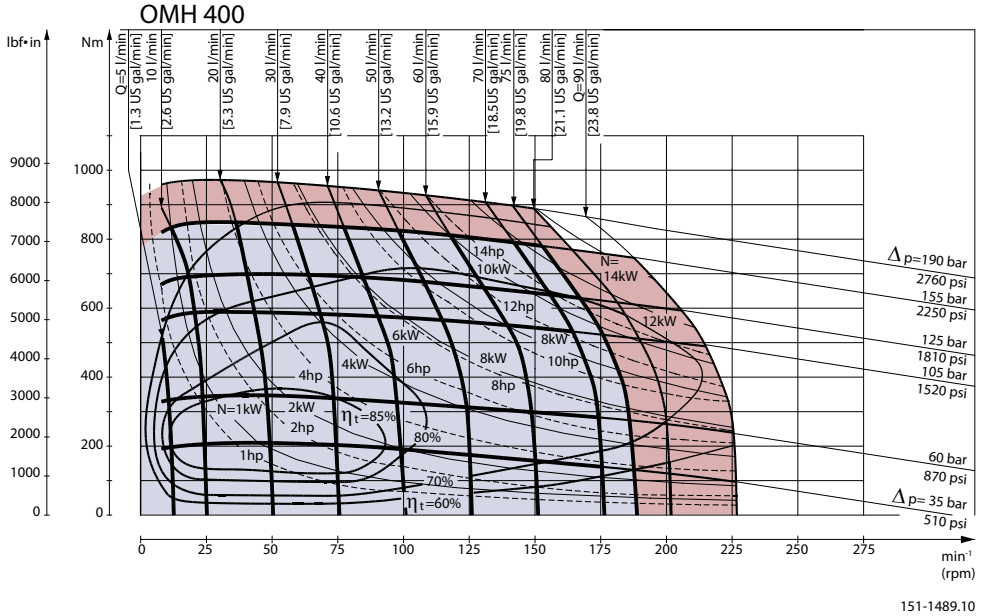


OMH function diagrams

OMH 315 function diagram

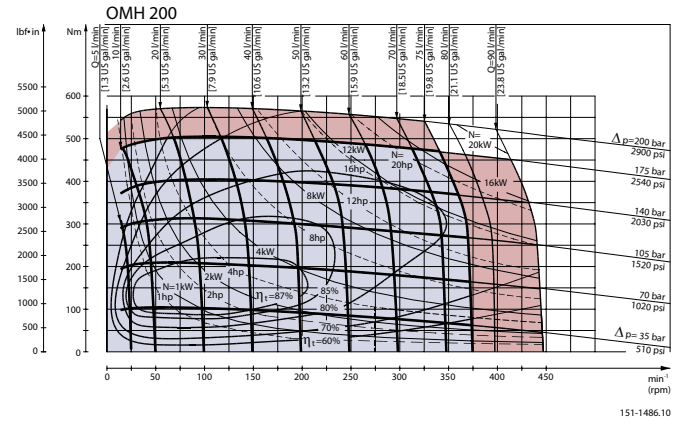


OMH 400 function diagram



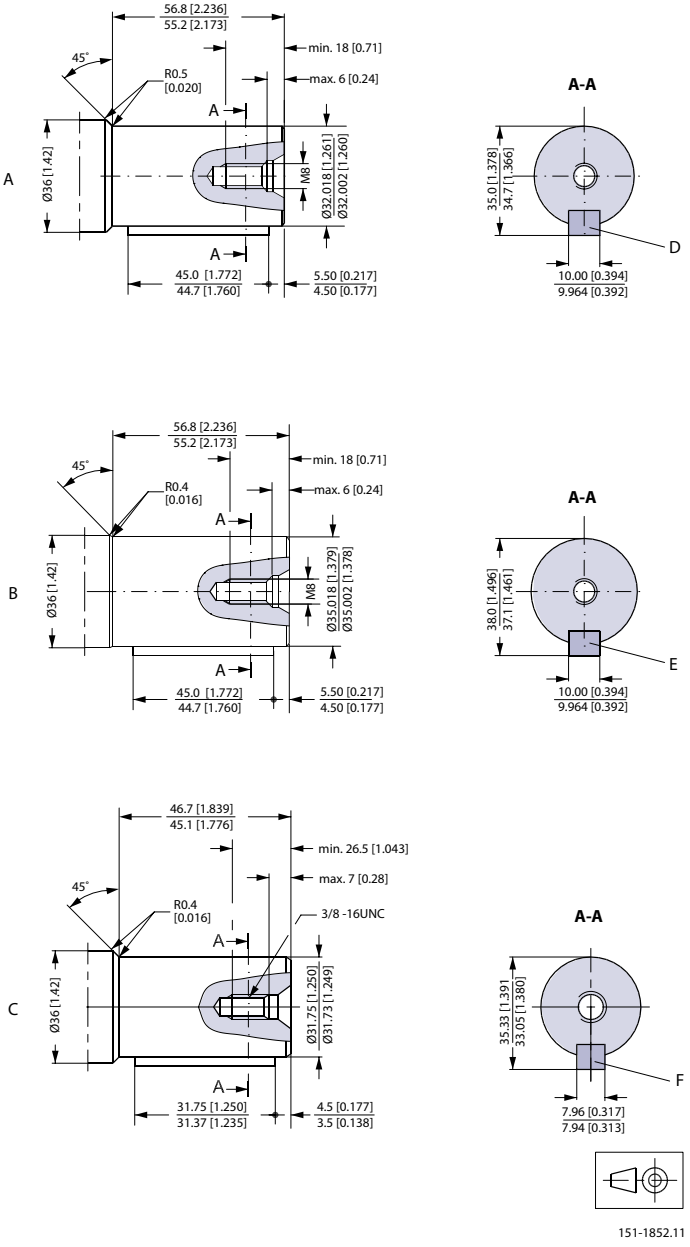
OMH function diagrams

OMH 500 function diagram



Shaft Version

Shaft Version



A: Cylindrical shaft 32 mm

B: Cylindrical shaft 35 mm

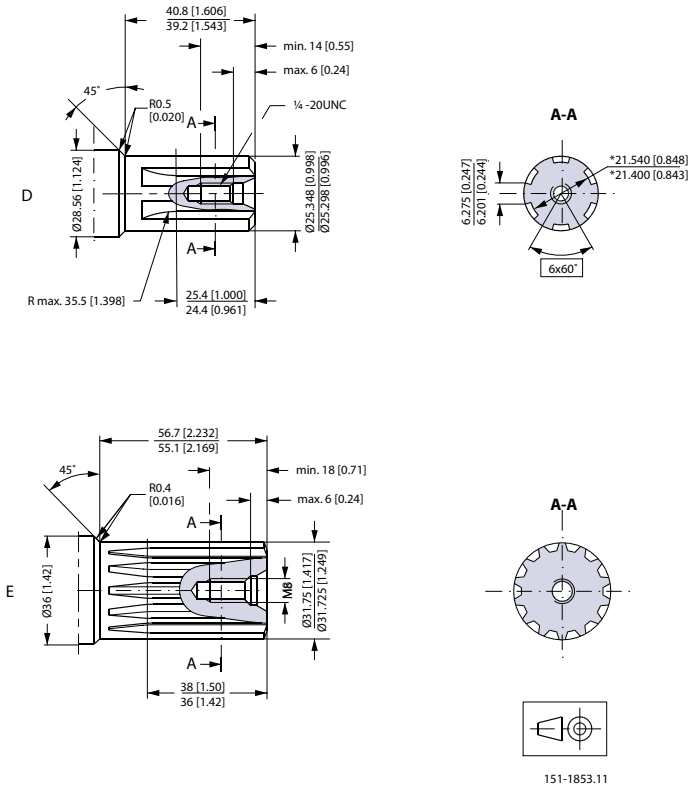
US version
C: Cylindrical shaft 1 1/4 in

D: Parallel key
A10 × 8 × 45
DIN 6885

E: Parallel key
A10 × 8 × 45
DIN 6885

F: Parallel key
5/16 × 5/16 × 11/4 in
SAE J 744

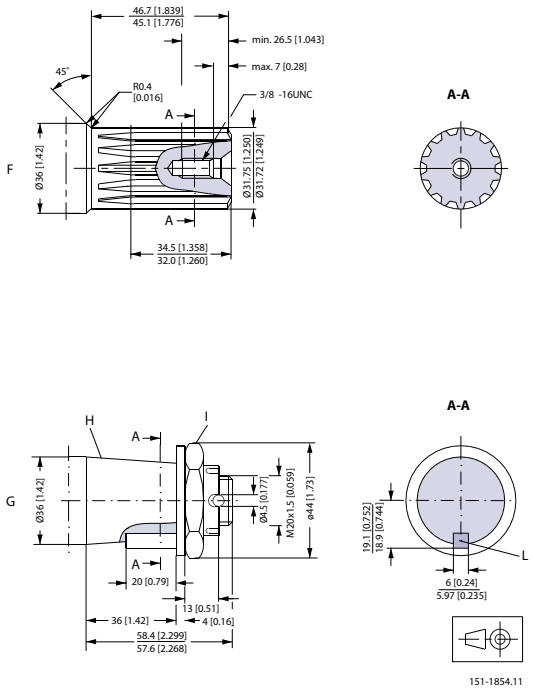
Shaft Version



D: Splined shaft
SAE 6 B (B.S. 2059)
Straight-sided,
bottom fitting, deep.
Fit 2
Nom. size 1 in
*Deviates from
SAE 6 B (B.S. 2059)

E. Involute splined shaft
ANS B92.1 - 1980 standard
Flat root side fit
Pitch 12/24
Teeth 14
Major dia. 1.25 in
Pressure angle 30°

Shaft Version



US version
F. Involute splined shaft
ANS B92.1 - 1970 standard
Flat root side fit
Pitch 12/24
Teeth 14
Major dia. 1.25 in
Pressure angle 30°

L: Parallel key
B6 • 6 • 20
DIN 6885

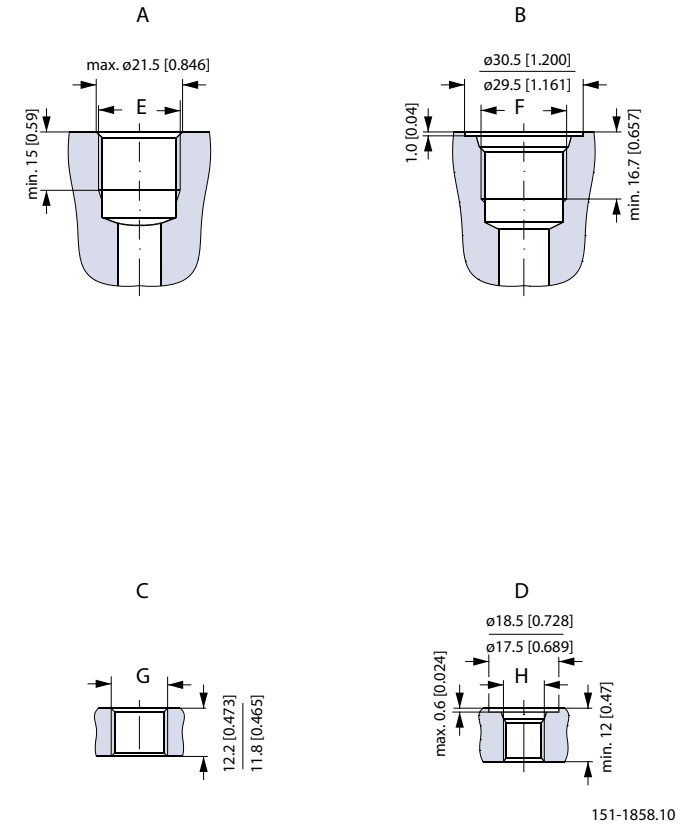
G: Tapered shaft 35 mm

H: Taper 1:10

I: DIN 937
NV 41
Tightening torque:
200 ± 10 Nm [1770 ±85 lbf·in]

Technical Data

Port Thread Versions



A: G main ports

E: ISO 228/1 - G1/2

C: G drain port

G: ISO 228/1 - G1/4

B: UNF main ports

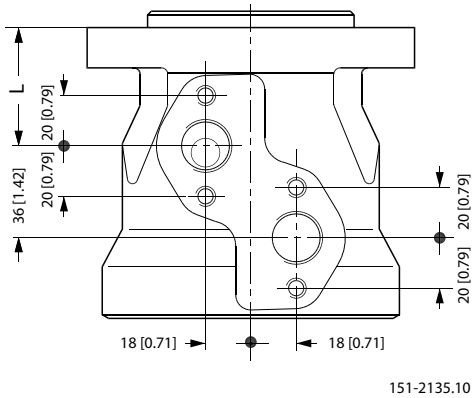
F: 7/8 - 14 UNF
O-ring boss port

D: UNF drain port

H: 7/16 - 20 UNF
O-ring boss port

Manifold Mount

European version



Technical Data

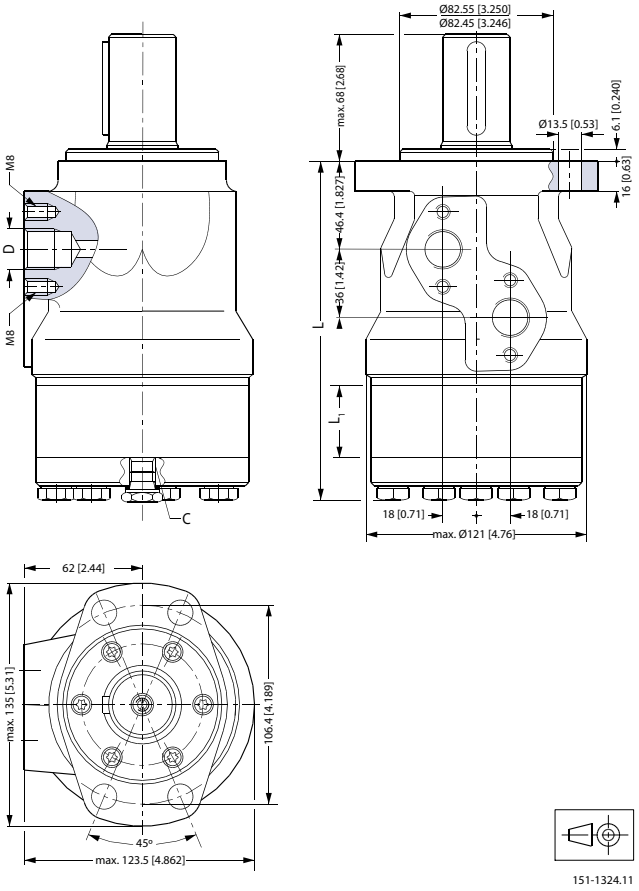
L: see dimensional drawing for given OMH motor: *Dimensions-European Version* on page 93 and *Dimensions-US Version* on page 94

OMH dimensions

Dimensions-European Version

Dimensions

Side port version with 4 hole oval mounting flange (A4-flange).



C: Drain connection
G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

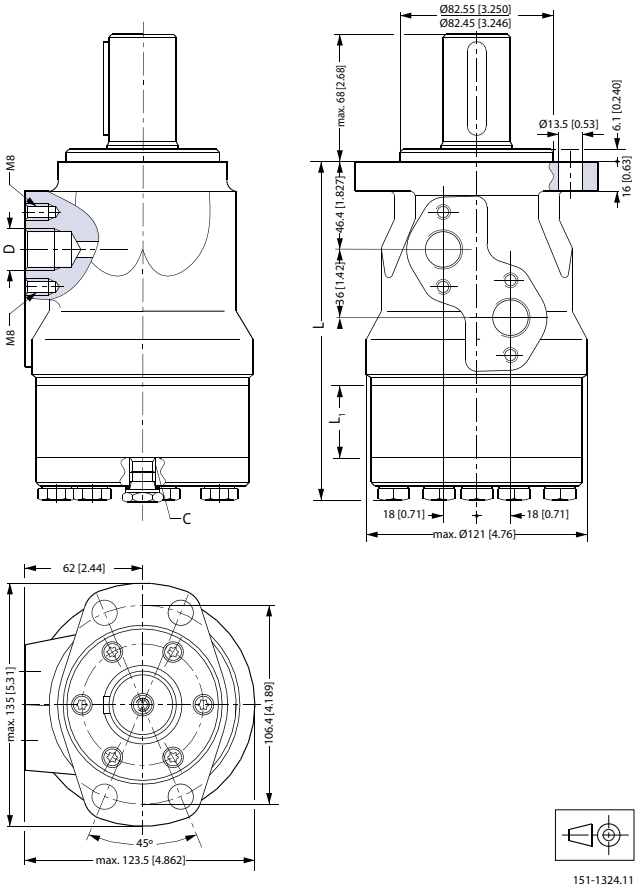
Type	Max. L		L1	
	mm	[in]	mm	[in]
OMH 200	171.1	[6.74]	27.8	[1.09]
OMH 250	178.1	[7.01]	34.8	[1.37]
OMH 315	186.8	[7.35]	43.5	[1.71]
OMH 400	198.1	[7.80]	54.8	[2.16]
OMH 500	208.3	[8.20]	65.0	[2.56]

OMH dimensions

Dimensions-US Version

Dimensions

Side port version with 4 hole oval mounting flange (A4 flange).



C: Drain connection
7/16 - 20 UNF;
12 mm [0.47 in] deep

D: 7/8 - 14 UNF;
15 mm [0.59 in] deep

Output shaft.max.	**L2**	
	mm	**[in]**
Splined shaft 1 in	50.5	[1.99]
Other shaft versions	58.0	[2.28]

Type	**Max. L**		**L1**	
	mm	**[in]**	**mm**	**[in]**
OMH 200	171.1	[6.74]	27.8	[1.09]
OMH 250	178.1	[7.01]	34.8	[1.37]
OMH 315	186.8	[7.35]	43.5	[1.71]
OMH 400	198.1	[7.80]	54.8	[2.16]
OMH 500	208.3	[8.20]	65.0	[2.56]

Weight of motors

Weight of OMP, OMR and OMH motors

Weight of OMP, OMR and OMH motors

Code no	Weight	
	kg	[lb]
151-0208	7.2	[15.9]
151-0242	6.9	[15.2]
151-0243	7.0	[15.4]
151-0244	7.5	[16.5]
151-0245	8.0	[17.6]
151-0246	9.0	[19.8]
151-0247	8.5	[18.7]
151-0248	6.7	[14.8]
151-0265	6.7	[14.8]
151-0266	6.9	[15.2]
151-0267	7.0	[15.4]
151-0268	7.5	[16.5]
151-0269	8.0	[17.6]
151-0270	9.0	[19.8]
151-0271	8.5	[18.7]
151-0300	5.6	[12.3]
151-0301	5.7	[12.6]
151-0302	5.9	[13.0]
151-0303	6.0	[13.2]
151-0304	6.2	[13.7]
151-0305	6.4	[14.1]
151-0306	6.6	[14.6]
151-0307	6.9	[15.2]
151-0308	7.4	[16.3]
151-0310	5.6	[12.3]
151-0311	5.7	[12.6]
151-0312	5.9	[13.0]
151-0313	6.0	[13.2]
151-0314	6.2	[13.7]
151-0315	6.4	[14.1]
151-0316	6.6	[14.6]
151-0317	6.9	[15.2]
151-0318	7.4	[16.3]
151-0319	5.6	[12.3]
151-0330	5.6	[12.3]
151-0331	5.7	[12.6]
151-0332	5.9	[13.0]
151-0333	6.0	[13.2]
151-0334	6.2	[13.7]
151-0335	6.4	[14.1]
151-0336	6.6	[14.6]
151-0337	6.9	[15.2]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-0338	7.4	[16.3]
151-0340	5.5	[12.1]
151-0341	5.5	[12.1]
151-0342	5.6	[12.3]
151-0400	6.7	[14.8]
151-0401	6.9	[15.2]
151-0402	7.0	[15.4]
151-0403	7.2	[15.9]
151-0404	7.5	[16.5]
151-0405	8.0	[17.6]
151-0406	8.5	[18.7]
151-0407	9.0	[19.8]
151-0408	9.5	[20.9]
151-0410	6.7	[14.8]
151-0411	6.9	[15.2]
151-0412	7.0	[15.4]
151-0413	7.2	[15.9]
151-0414	7.5	[16.5]
151-0415	8.0	[17.6]
151-0416	8.5	[18.7]
151-0417	9.0	[19.8]
151-0418	9.5	[20.9]
151-0420	6.7	[14.8]
151-0421	6.9	[15.2]
151-0422	7.0	[15.4]
151-0423	7.2	[15.9]
151-0424	7.5	[16.5]
151-0425	8.0	[17.6]
151-0426	8.5	[18.7]
151-0427	9.0	[19.8]
151-0428	9.5	[20.9]
151-0600	5.6	[12.3]
151-0601	5.7	[12.6]
151-0602	5.9	[13.0]
151-0603	6.0	[13.2]
151-0604	6.2	[13.7]
151-0605	6.4	[14.1]
151-0606	6.6	[14.6]
151-0607	6.9	[15.2]
151-0608	7.4	[16.3]
151-0610	5.6	[12.3]
151-0611	5.7	[12.6]
151-0612	5.9	[13.0]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-0613	6.0	[13.2]
151-0614	6.2	[13.7]
151-0615	6.4	[14.1]
151-0616	6.6	[14.6]
151-0617	6.9	[15.2]
151-0618	7.4	[16.3]
151-0622	5.9	[13.0]
151-0624	6.2	[13.7]
151-0625	6.4	[14.1]
151-0627	6.9	[15.2]
151-0630	5.6	[12.3]
151-0631	5.7	[12.6]
151-0632	5.9	[13.0]
151-0633	6.0	[13.2]
151-0634	6.2	[13.7]
151-0635	6.4	[14.1]
151-0636	6.6	[14.6]
151-0637	6.9	[15.2]
151-0638	7.4	[16.3]
151-0640	5.5	[12.1]
151-0641	5.5	[12.1]
151-0642	5.6	[12.3]
151-0646	5.9	[13.0]
151-0700	6.7	[14.8]
151-0701	6.9	[15.2]
151-0702	7.0	[15.4]
151-0703	7.2	[15.9]
151-0704	7.5	[16.5]
151-0705	8.0	[17.6]
151-0706	8.5	[18.7]
151-0707	9.0	[19.8]
151-0708	9.5	[20.9]
151-0710	6.7	[14.8]
151-0711	6.9	[15.2]
151-0712	7.0	[15.4]
151-0713	7.2	[15.9]
151-0714	7.5	[16.5]
151-0715	8.0	[17.6]
151-0716	8.5	[18.7]
151-0717	9.0	[19.8]
151-0718	9.5	[20.9]
151-0720	6.7	[14.8]
151-0721	6.9	[15.2]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-0722	7.0	[15.4]
151-0723	7.2	[15.9]
151-0724	7.5	[16.5]
151-0725	8.0	[17.6]
151-0726	8.5	[18.7]
151-0727	9.0	[19.8]
151-0728	9.5	[20.9]
151-1208	5.6	[12.3]
151-1209	5.7	[12.6]
151-1210	5.9	[13.0]
151-1211	6.2	[13.7]
151-1212	6.4	[14.1]
151-1213	6.6	[14.6]
151-1214	6.9	[15.2]
151-1215	7.4	[16.3]
151-1217	6.0	[13.2]
151-1231	6.7	[14.8]
151-1232	6.9	[15.2]
151-1233	7.0	[15.4]
151-1234	7.5	[16.5]
151-1235	8.0	[17.6]
151-1236	8.5	[18.7]
151-1237	9.0	[19.8]
151-1238	7.2	[15.9]
151-1243	9.5	[20.9]
151-5001	5.6	[12.3]
151-5002	5.7	[12.6]
151-5003	5.9	[13.0]
151-5004	6.0	[13.2]
151-5005	6.2	[13.7]
151-5006	6.4	[14.1]
151-5007	6.6	[14.6]
151-5008	6.9	[15.2]
151-5009	7.4	[16.3]
151-5010	5.4	[11.9]
151-5174	5.4	[11.9]
151-5191	6.1	[13.4]
151-5192	6.2	[13.7]
151-5193	6.4	[14.1]
151-5194	6.5	[14.3]
151-5195	6.7	[14.8]
151-5196	6.9	[15.2]
151-5197	7.1	[15.7]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-5198	7.4	[16.3]
151-5199	7.9	[17.4]
151-5211	5.5	[12.1]
151-5212	5.6	[12.3]
151-5213	5.8	[12.8]
151-5214	5.9	[13.0]
151-5215	6.1	[13.4]
151-5216	6.3	[13.9]
151-5217	6.5	[14.3]
151-5218	6.8	[15.0]
151-5219	7.3	[16.1]
151-5301	5.5	[12.1]
151-5302	5.6	[12.3]
151-5303	5.8	[12.8]
151-5304	5.9	[13.0]
151-5305	6.1	[13.4]
151-5306	6.3	[13.9]
151-5307	6.5	[14.3]
151-5308	6.8	[15.0]
151-5309	7.3	[16.1]
151-5311	5.6	[12.3]
151-5312	5.7	[12.6]
151-5313	5.9	[13.0]
151-5315	6.2	[13.7]
151-5316	6.4	[14.1]
151-5318	6.9	[15.2]
151-6000	6.7	[14.8]
151-6001	6.9	[15.2]
151-6002	7.0	[15.4]
151-6003	7.2	[15.9]
151-6004	7.5	[16.5]
151-6005	8.0	[17.6]
151-6006	8.5	[18.7]
151-6007	9.0	[19.8]
151-6008	9.5	[20.9]
151-6010	6.7	[14.8]
151-6011	6.9	[15.2]
151-6012	7.0	[15.4]
151-6013	7.2	[15.9]
151-6014	7.5	[16.5]
151-6015	8.0	[17.6]
151-6016	8.5	[18.7]
151-6017	9.0	[19.8]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-6018	9.5	[20.9]
151-6110	6.7	[14.8]
151-6111	6.9	[15.2]
151-6112	7.0	[15.4]
151-6113	7.2	[15.9]
151-6114	7.5	[16.5]
151-6115	8.0	[17.6]
151-6116	8.5	[18.7]
151-6117	9.0	[19.8]
151-6118	9.5	[20.9]
151-6190	7.3	[16.1]
151-6191	7.5	[16.5]
151-6192	7.6	[16.8]
151-6193	7.8	[17.2]
151-6194	8.1	[17.9]
151-6195	8.6	[19.0]
151-6196	9.1	[20.1]
151-6197	9.6	[21.2]
151-6198	10.1	[22.3]
151-6210	6.7	[14.8]
151-6211	6.9	[15.2]
151-6212	7.0	[15.4]
151-6213	7.2	[15.9]
151-6214	7.5	[16.5]
151-6215	8.0	[17.6]
151-6216	8.5	[18.7]
151-6217	9.0	[19.8]
151-6218	9.5	[20.9]
151-6294	9.5	[20.9]
151-6295	7.2	[15.9]
151-6296	9.5	[20.9]
151-6300	9.0	[19.8]
151-6301	9.4	[20.7]
151-6302	9.5	[20.9]
151-6303	9.7	[21.4]
151-6304	10.0	[22.1]
151-6305	10.5	[23.1]
151-6306	11.0	[24.3]
151-6307	11.5	[25.4]
151-6308	12.0	[26.5]
151-6380	6.7	[14.8]
151-6381	6.9	[15.2]
151-6383	7.2	[15.9]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-6384	7.5	[16.5]
151-6385	8.0	[17.6]
151-6386	8.5	[18.7]
151-6387	9.0	[19.8]
151-6388	9.5	[20.9]
151-6430	9.0	[19.8]
151-6431	9.4	[20.7]
151-6432	9.5	[20.9]
151-6433	9.7	[21.4]
151-6434	10.0	[22.1]
151-6435	10.5	[23.1]
151-6436	11.0	[24.3]
151-6437	11.5	[25.4]
151-6438	12.0	[26.5]
151-6442	14.5	[32.0]
151-6443	14.7	[32.4]
151-6444	15.0	[33.1]
151-6445	15.5	[34.2]
151-6461	11.5	[25.4]
151-6462	12.0	[26.5]
151-6463	12.0	[26.5]
151-6464	12.5	[27.6]
151-6465	12.5	[27.6]
151-6466	13.0	[28.7]
151-6467	13.5	[29.8]
151-6468	14.0	[30.9]
151-6471	11.5	[25.4]
151-6472	12.0	[26.5]
151-6473	12.0	[26.5]
151-6474	12.5	[27.6]
151-6475	12.5	[27.6]
151-6476	13.0	[28.7]
151-6477	13.5	[29.8]
151-6478	14.0	[30.9]
151-7021	5.0	[11.0]
151-7022	5.1	[11.2]
151-7023	5.3	[11.7]
151-7024	5.4	[11.9]
151-7025	5.6	[12.3]
151-7026	5.8	[12.8]
151-7027	6.0	[13.2]
151-7028	6.3	[13.9]
151-7029	6.8	[15.0]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-7041	5.6	[12.3]
151-7042	5.7	[12.6]
151-7043	5.9	[13.0]
151-7044	5.4	[11.9]
151-7045	6.2	[13.7]
151-7046	6.4	[14.1]
151-7047	6.6	[14.6]
151-7048	6.9	[15.2]
151-7049	7.4	[16.3]
151-7061	5.0	[11.0]
151-7062	5.1	[11.2]
151-7063	5.3	[11.7]
151-7065	5.6	[12.3]
151-7066	5.8	[12.8]
151-7067	6.0	[13.2]
151-7068	6.3	[13.9]
151-7069	6.8	[15.0]
151-7080	5.4	[12.0]
151-7081	5.4	[12.0]
151-7082	5.6	[12.3]
151-7101	5.5	[12.1]
151-7102	5.6	[12.3]
151-7103	5.8	[12.8]
151-7104	5.9	[13.0]
151-7105	6.1	[13.4]
151-7106	6.3	[13.9]
151-7107	6.5	[14.3]
151-7108	6.8	[15.0]
151-7109	7.3	[16.1]
151-7240	6.7	[14.8]
151-7241	6.9	[15.2]
151-7242	7.0	[15.4]
151-7243	7.2	[15.9]
151-7244	7.5	[16.5]
151-7245	8.0	[17.6]
151-7246	8.5	[18.7]
151-7247	9.0	[19.8]
151-7248	9.5	[20.9]
151-7250	6.7	[14.8]
151-7251	6.9	[15.2]
151-7252	7.0	[15.4]
151-7253	7.2	[15.9]
151-7254	7.5	[16.5]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151-7255	8.0	[17.6]
151-7256	8.5	[18.7]
151-7257	9.0	[19.8]
151-7258	9.5	[20.9]
151-7260	6.1	[13.4]
151-7261	6.3	[13.9]
151-7262	6.4	[14.1]
151-7263	6.6	[14.6]
151-7264	6.9	[15.2]
151-7265	7.4	[16.3]
151-7266	7.9	[17.4]
151-7267	8.4	[18.5]
151-7269	8.9	[19.6]
151H1002	10.5	[23.1]
151H1003	11.0	[24.3]
151H1004	11.5	[25.4]
151H1005	12.3	[27.1]
151H1006	13.0	[28.7]
151H1012	10.5	[23.1]
151H1013	11.0	[24.3]
151H1014	11.5	[25.4]
151H1015	12.3	[27.1]
151H1016	13.0	[28.7]
151H1022	10.5	[23.1]
151H1023	11.0	[24.3]
151H1024	11.5	[25.4]
151H1025	12.3	[27.1]
151H1026	13.0	[28.7]
151H1034	11.5	[25.4]
151H1035	12.3	[27.1]
151H1036	13.0	[28.7]
151H1042	10.5	[23.1]
151H1043	11.0	[24.3]
151H1044	11.5	[25.4]
151H1045	12.3	[27.1]
151H1046	13.0	[28.7]
151H1052	10.5	[23.1]
151H1053	11.0	[24.3]
151H1054	11.5	[25.4]
151H1055	12.3	[27.1]
151H1056	13.0	[28.7]
151H1080	10.5	[23.1]
151H1081	13.0	[28.7]

Weight of motors

Weight of OMP, OMR and OMH motors (continued)

Code no	Weight	
	kg	[lb]
151H1082	11.0	[24.3]
151H1083	11.5	[25.4]
151H1084	12.3	[27.1]

ENGINEERING
TOMORROW

Products we offer:

- Bent Axis Motors
- Closed Circuit Axial Piston Pumps and Motors
- Displays
- Electrohydraulic Power Steering
- Electrohydraulics
- Hydraulic Power Steering
- Integrated Systems
- Joysticks and Control Handles
- Microcontrollers and Software
- Open Circuit Axial Piston Pumps
- Orbital Motors
- PLUS+1® GUIDE
- Proportional Valves
- Sensors
- Steering
- Transit Mixer Drives

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electronic components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market. Building on our extensive applications expertise, we work closely with our customers to ensure exceptional performance for a broad range of off-highway vehicles.

We help OEMs around the world speed up system development, reduce costs and bring vehicles to market faster.

Danfoss – Your Strongest Partner in Mobile Hydraulics.

Go to www.powersolutions.danfoss.com for further product information.

Wherever off-highway vehicles are at work, so is Danfoss. We offer expert worldwide support for our customers, ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide comprehensive global service for all of our components.

Please contact the Danfoss Power Solution representative nearest you.

Comatrol
www.comatrol.com

Schwarzmüller-Inverter
www.schwarzmueller-inverter.com

Turolla
www.turollaocg.com

Hydro-Gear
www.hydro-gear.com

Daikin-Sauer-Danfoss
www.daikin-sauer-danfoss.com

Local address:

Danfoss
Power Solutions (US) Company
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

Danfoss
Power Solutions GmbH & Co. OHG
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

Danfoss
Power Solutions ApS
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

Danfoss
Power Solutions Trading (Shanghai) Co., Ltd.
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 3418 5200