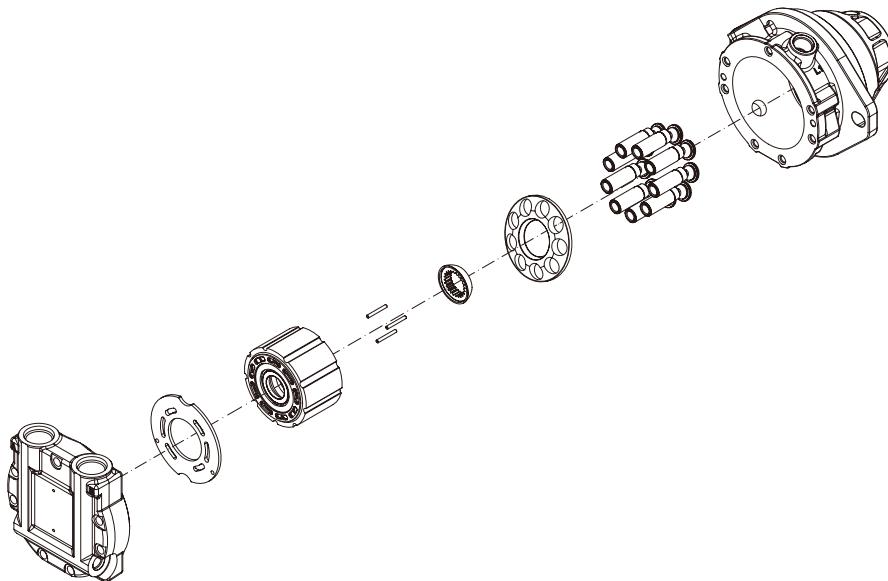


Parts Manual

# MP1 Axial Piston Motors

## Size 28/32



**Revision history**

*Table of revisions*

<b>Date</b>	<b>Changed</b>	<b>Rev</b>
September 2023	Added new porting types	0104
June 2023	Fixed porting type and housing sections	0103
October 2022	Updated Date Begin	0102
October 2022	First edition	0101

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## General information

### Service parts identification

The following information and procedure is used to identify the module group, item number, manufacture date, part number, and part name of the parts included in the MP1 motor.

The parts listed include all parts which may be used when performing either "Minor Repairs", "Major Repairs" or "Conversions" on the MP1M.

### Nameplate

Each unit will have a nameplate affixed to the housing. The nameplate of the MP1M will include the following information:

#### Model code

The Danfoss model code completely defines the specific unit and must be used when ordering parts to service this product.

#### Model/material number

The Danfoss model number (also known as material number) is used by the factory in manufacturing. On repeat orders, a complete unit can be ordered by the model number.

#### Serial number

The Danfoss serial number is used to identify the manufacture date and the unit sequence in the build. The serial number is also used to identify the units warranty time period.

The letter code indicates the location of original manufacture (assembly).

The first number (2 digits) indicates the year of manufacture. The second number (2 digits) indicates the calendar week of manufacture.

The third number (5 digits) is a sequential number used to identify a specific unit.



## General information

### Date code

The date code is defined as the year and week of manufacture. The same item number may list more than one part number. This indicates that there is more than one configuration for that item number. You will see that there are different date codes for the different part numbers. Find the date code of your unit from the nameplate to determine which service part number you need to order.

*Example: The service part desired is item G30*

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
80	G30	89-17		8000243	End cap gasket	1
	G30		89-16	8000151	End cap gasket (SB-1995-006)	1

All units using this order code with a date code prior to 89-17 must use part number "8000151." All units with a date code of 89-17 and newer must use part number "8000243."

### About service bulletins

A Service Bulletin Number (SB-\_\_\_\_-\_\_\_\_) may follow the "Part Name" of the part you desire. You must read that Service Bulletin prior to ordering that part. The information contained in these Service Bulletins, as of the print date of this bulletin, are included at the end of this manual. Service Bulletins contain more detailed information such as interchangeability, what additional parts are involved, etc. It is suggested that you add additional Service Bulletins to this manual as you receive them.

### Procedure to identify a part

The modular design of this product results in a simplified service parts list and part number identification procedure.

The same item numbers are used for same part names on all units within a product type. A part number that has another number following it in parentheses is done to make this a world wide manual.

### Regional part numbers

Some part numbers are region specific and should be ordered accordingly.

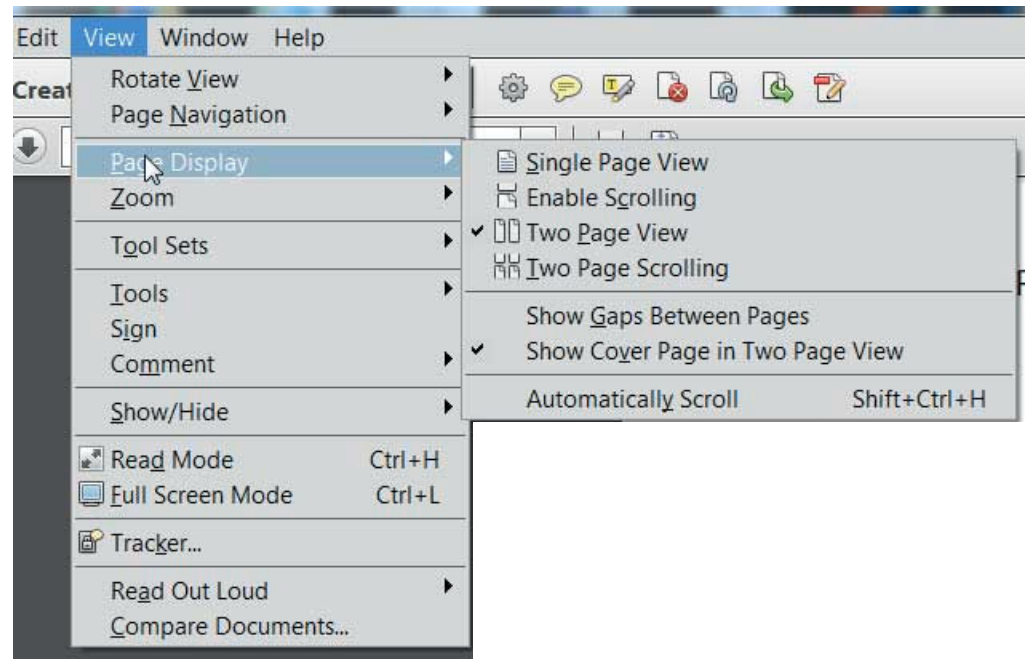
As an example, the part number (example: 314583 (9008000-0118)) will be used. The first number is sold in Germany. The number in parentheses is sold in the United States. Customers would order 9008000-0118 if ordering the part in the United States.

## General information

### Adobe Acrobat 2-page viewing

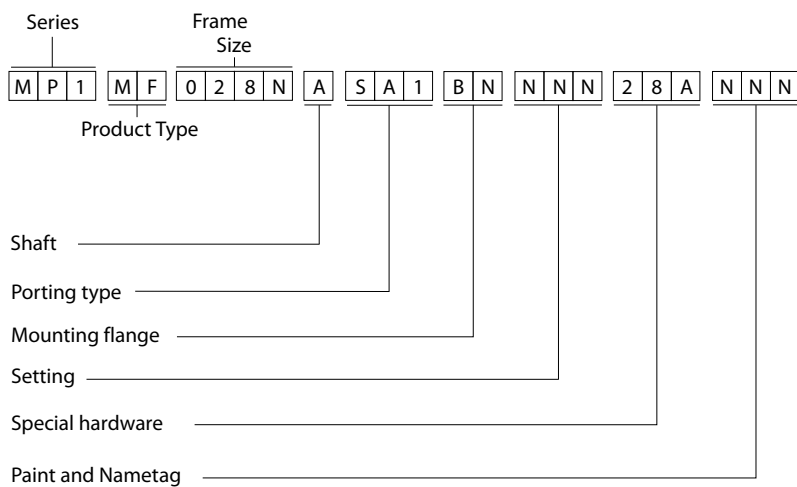
While viewing manual in Adobe Acrobat, the following settings need to be applied to ensure proper page display.

1. Select "View" → "Page Display" → "Two Page View"
2. Select "View" → "Page Display" → "Show Cover Page in Two Page View"



## General information

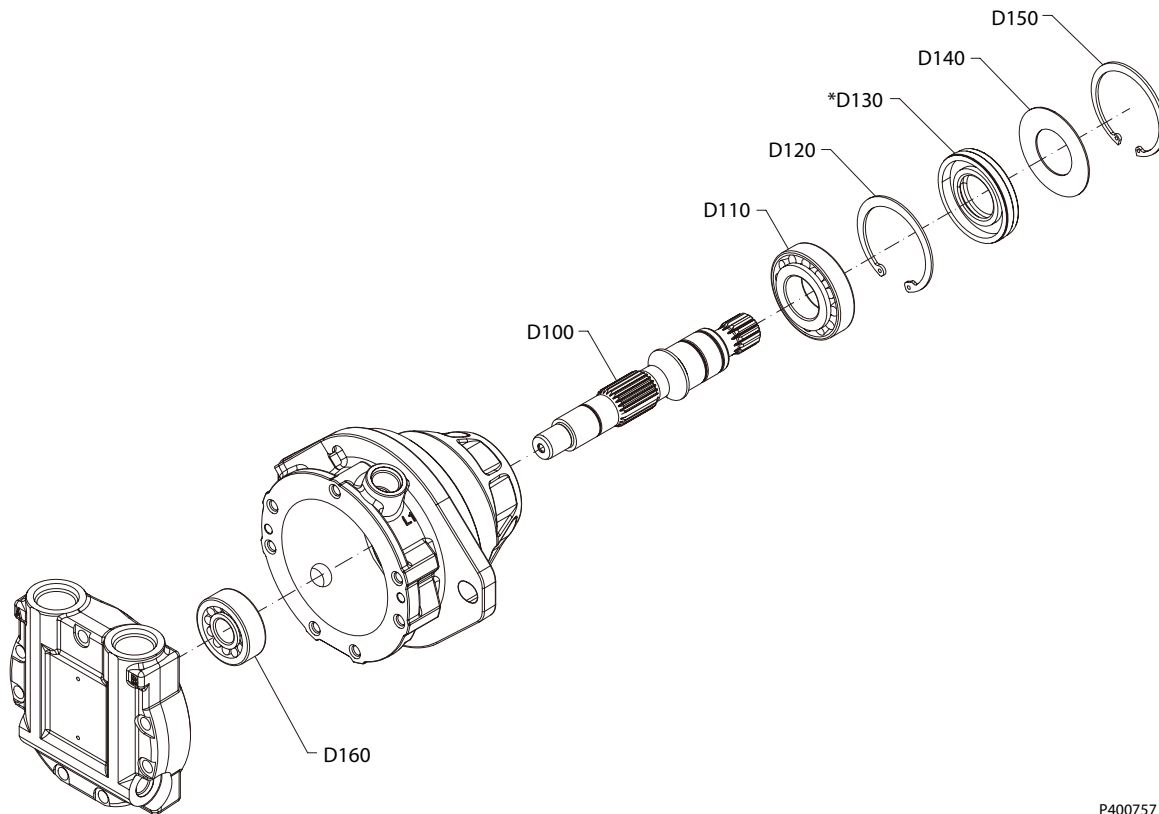
### Order code



## Shaft

### MP1M shaft A

Parts configuration



P400757

---

Generic housing and endcap used to show part location only.

---

\* Included in overhaul seal kit Q210



## Shaft

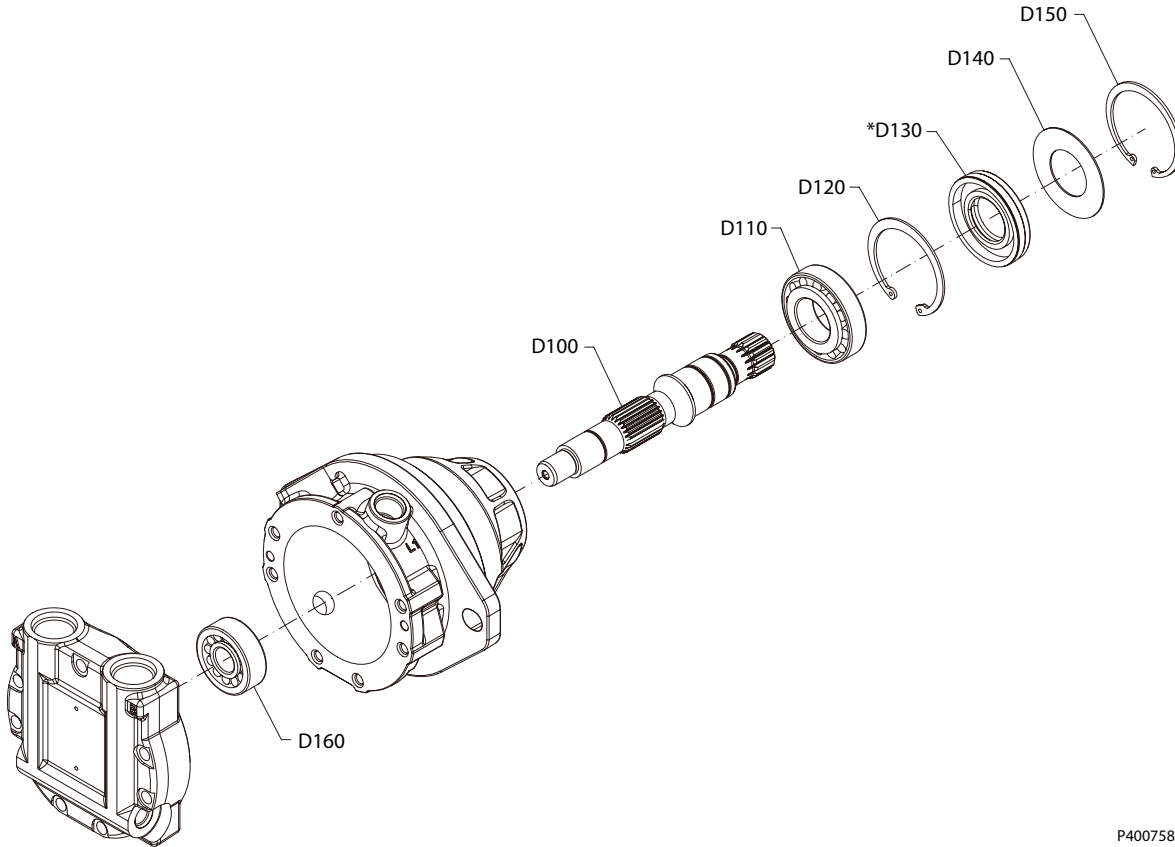
Order code: A

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D100	22-40		11288755	Shaft, 13T, 16/32 pitch	1
D110	22-40		11288759	Roller bearing, tapered	1
D120	22-40		11288760	Retaining ring	1
D130	22-40		11165487	Lip seal	1
D140	22-40		11288761	Washer	1
D150	22-40		FBE062	Retaining ring	1
D160	22-40		11288762	Roller bearing, tapered	

## Shaft

### MP1M shaft C

Parts configuration



P400758

---

Generic housing and endcap used to show part location only.

---

\* Included in overhaul seal kit Q210

## Shaft

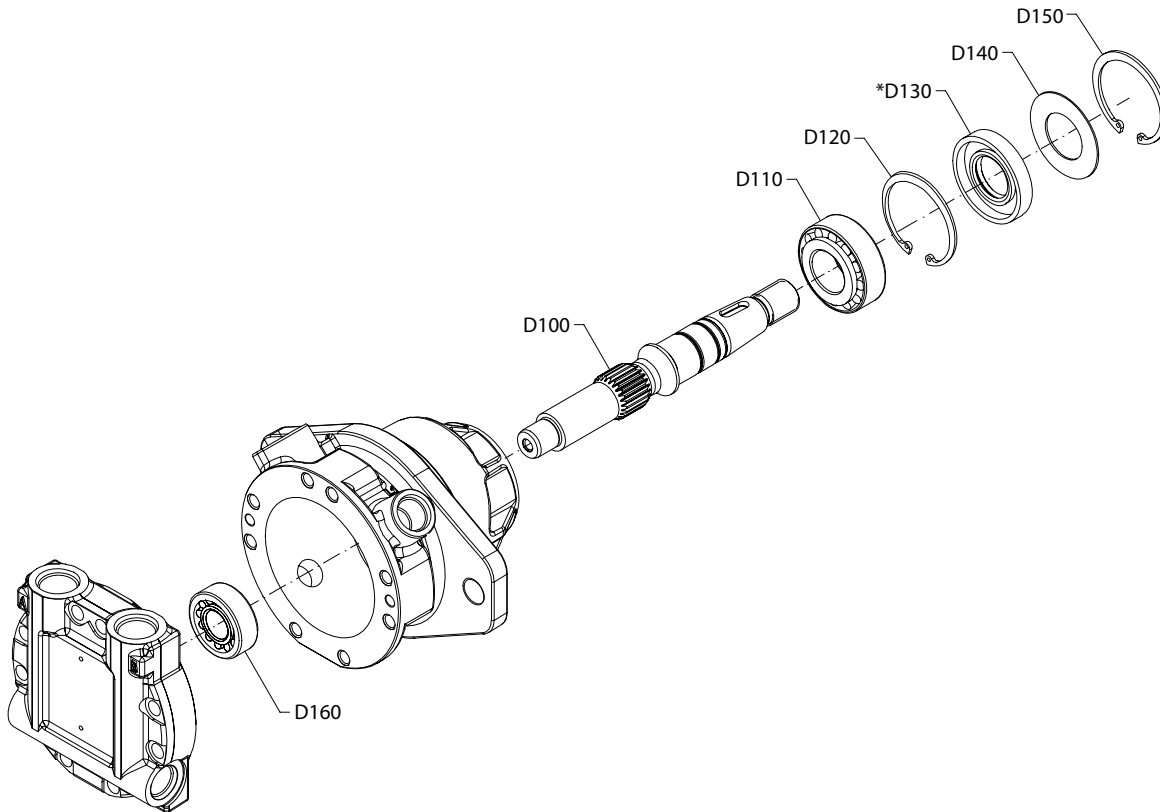
Order code: C

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D100	22-40		11288756	Shaft, 15T, 16/32 pitch	1
D110	22-40		11288759	Roller bearing, tapered	1
D120	22-40		11288760	Retaining ring	1
D130	22-40		11165487	Lip seal	1
D140	22-40		11288761	Washer	1
D150	22-40		FBE062	Retaining ring	1
D160	22-40		11288762	Roller bearing, tapered	1

## Shaft

### MP1M shaft G

Parts configuration



P400733

---

Generic housing and endcap used to show part location only.

---

\* Included in overhaul seal kit Q210

## Shaft

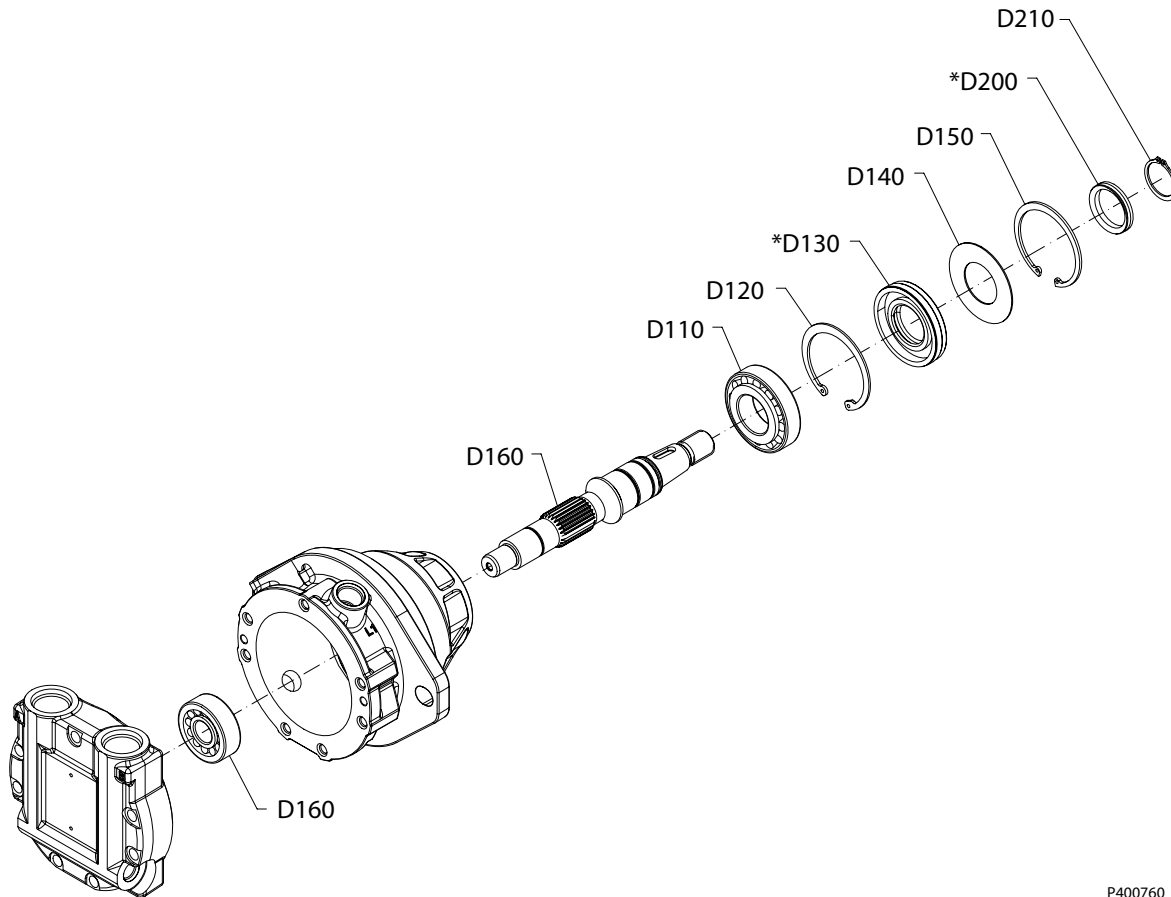
Order code: G

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D100	22-40		11228842	Shaft, tapered	1
D110	22-40		11228797	Roller bearing, tapered	1
D120	22-40		11228820	Retaining ring	1
D130	22-40		11228821	Lip seal	1
D140	22-40		11228822	Washer	1
D150	22-40		FBE052	Retaining ring	1
D160	22-40		11228823	Roller bearing, tapered	1

## Shaft

### MP1M shaft H

Parts configuration



P400760

---

Generic housing and end cap used to show part location only.

---

\* Included in overhaul seal kit Q210

## Shaft

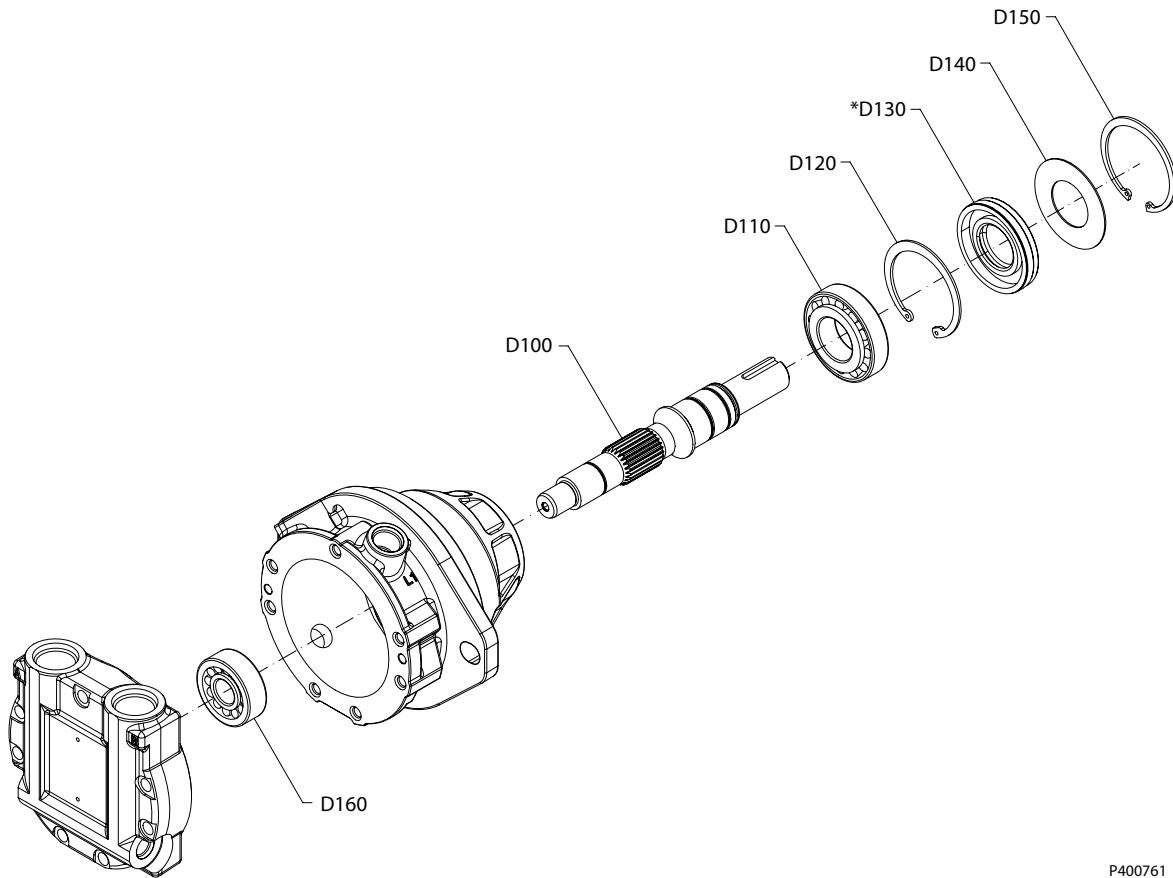
Order code: H

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D100	22-40		11288758	Shaft, tapered	1
D110	22-40		11288759	Roller bearing, tapered	1
D120	22-40		11288760	Retaining ring	1
D130	22-40		11165487	Lip seal	1
D140	22-40		11288761	Washer	1
D150	22-40		FBE062	Retaining ring	1
D160	22-40		11288762	Roller bearing, tapered	1
D200	22-40		11288763	Dust seal	1
D210	22-40		5000098	Retaining ring	1

## Shaft

### MP1M shaft J

Parts configuration



P400761

---

Generic housing and endcap used to show parts location only.

---

\* Included in overhaul seal kit Q210



## Shaft

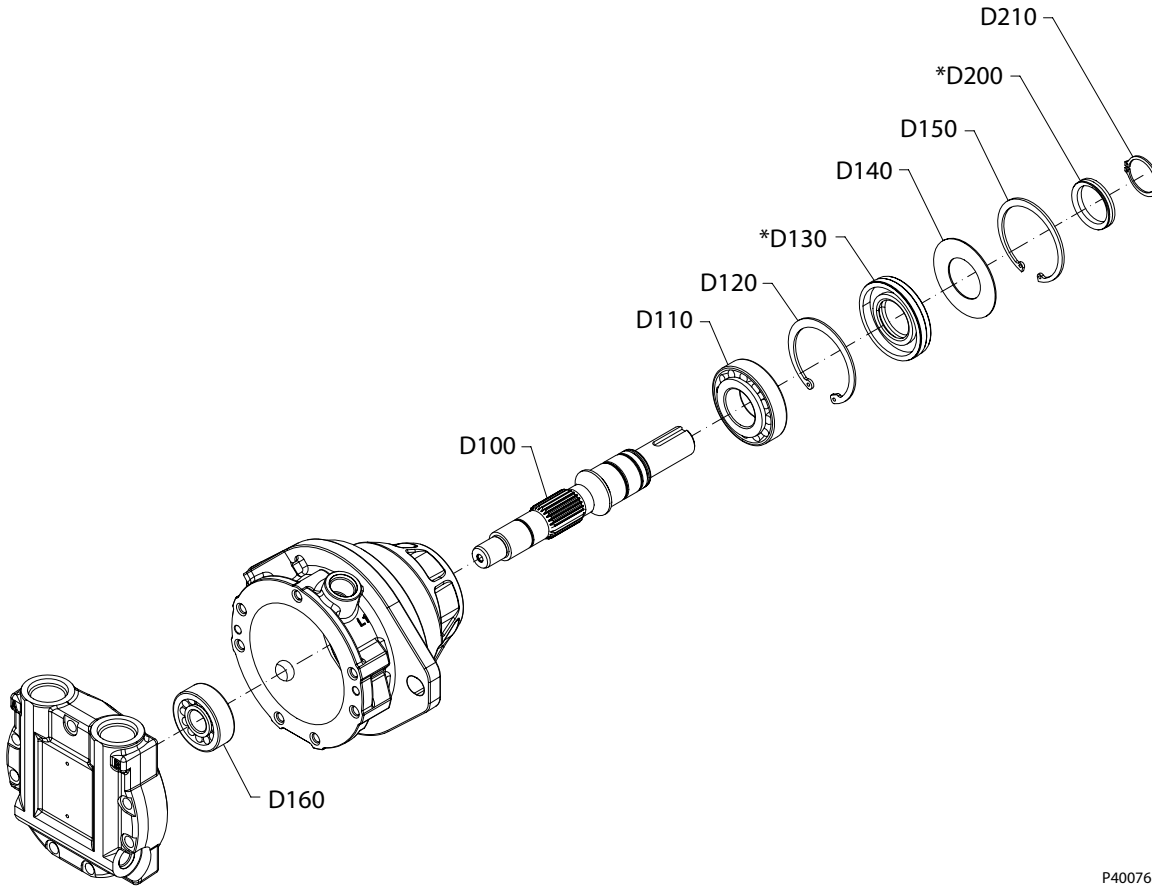
Order code: J

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D100	22-40		11288757	Shaft with medium straight key	1
D110	22-40		11288759	Roller bearing, tapered	1
D120	22-40		11288760	Retaining ring	1
D130	22-40		11165487	Lip seal	1
D140	22-40		11288761	Washer	1
D150	22-40		FBE062	Retaining ring	1
D160	22-40		11288762	Roller bearing, tapered	1

## Shaft

### MP1M shaft K

Parts configuration



P400762

---

Generic housing and endcap used to show part location only.

---

\* Included in overhaul seal kit Q210

## Shaft

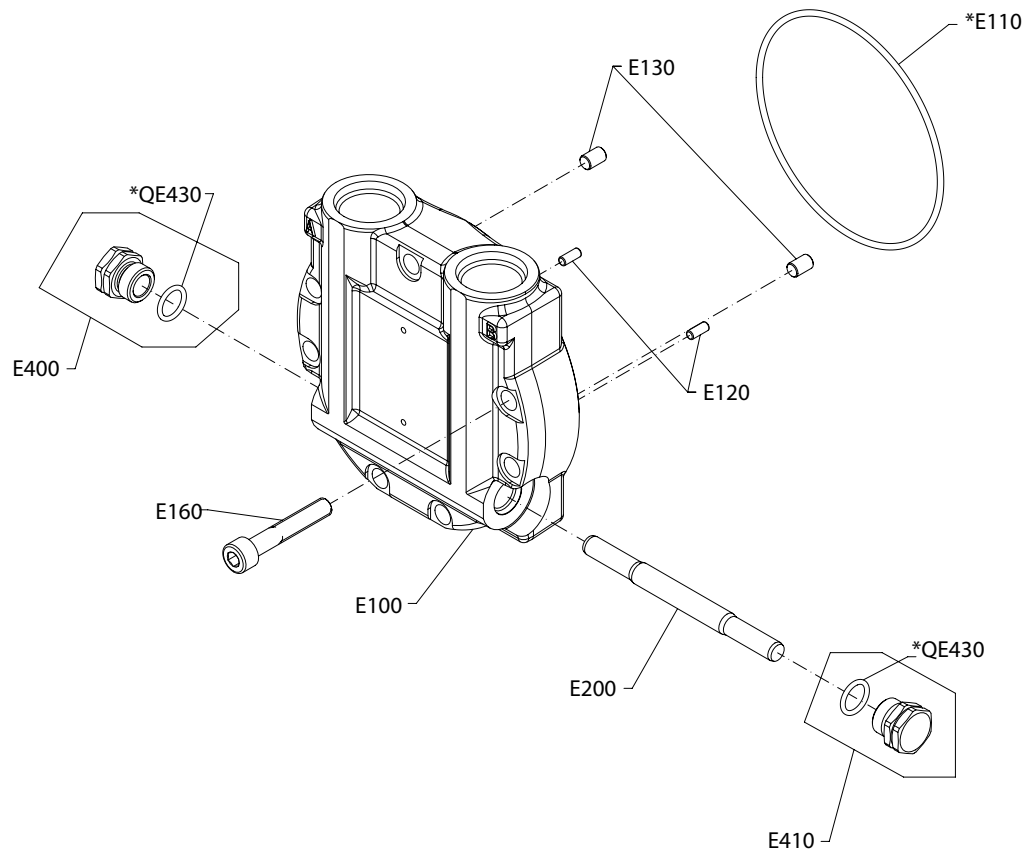
Order code: K

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D100	22-40		11288757	Shaft with medium shaft key	1
D110	22-40		11288759	Roller bearing, tapered	1
D120	22-40		11288760	Retaining ring	1
D130	22-40		11165487	Lip seal	1
D140	22-40		11288761	Washer	1
D150	22-40		FBE062	Retaining ring	1
D160	22-40		11288762	Roller bearing, tapered	1
D200	22-40		11288763	Dust seal	1
D210	22-40		5000098	Retaining ring	1

Porting type

MP1M porting type SA1, MA1

Parts configuration



P400763

\* Included in overhaul seal kit Q210

This option is available in inch and metric configuration. Please order accordingly.

### Porting type

#### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		733295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E200	22-40		11098213	Loop flushing spool, defeated	1
E400	22-40		1030932-SA	Plug assembly	1
E410	22-40		1030932-SA	Plug assembly	1
QE430	22-40		9004201-3700	O-ring	2

#### Order code: SA1 (inch)

E100	22-40		11288764	Endcap, inch	1
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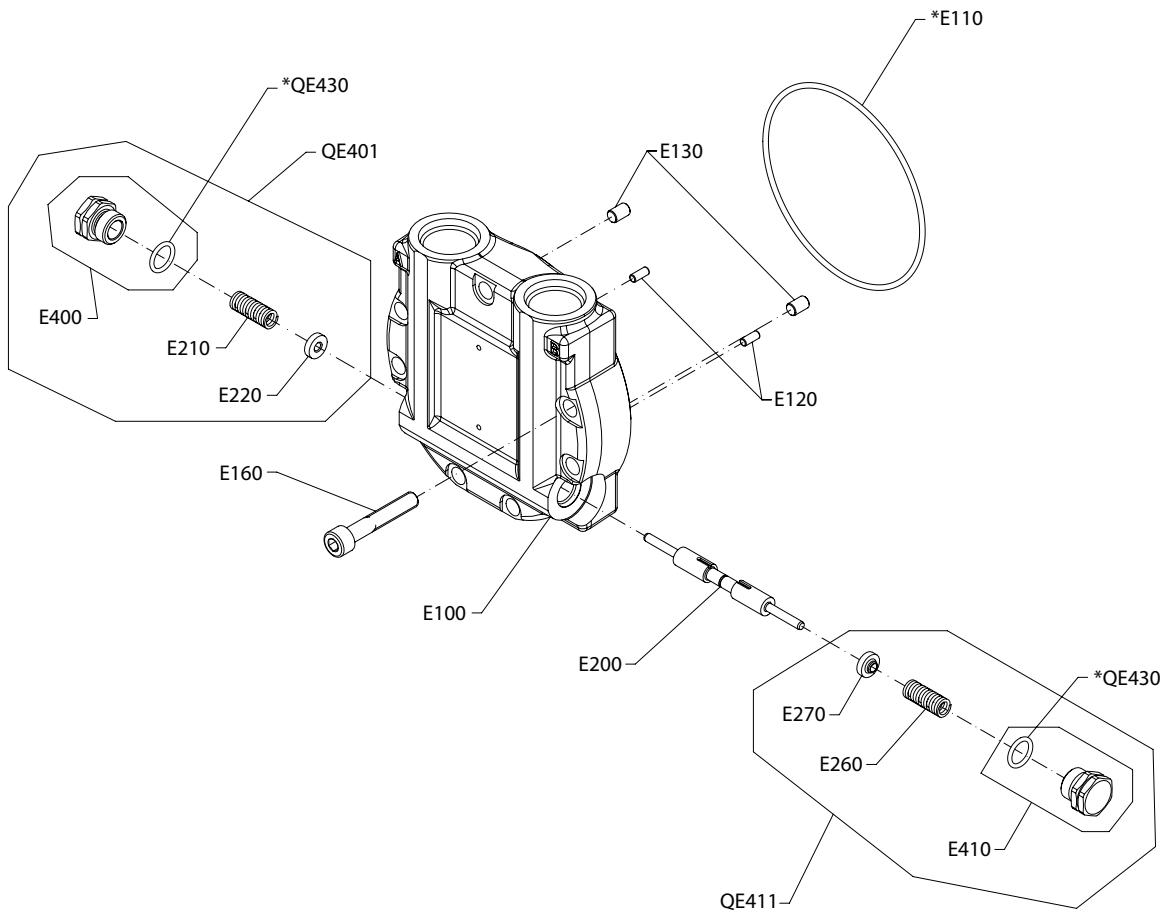
#### Order code: MA1 (metric)

E100	22-40		11288765	Endcap, metric	1
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**Porting type**

**MP1M porting type SB3, MB3**

*Parts configuration*



P400764

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		733295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E200	22-40		11120528	Loop flushing spool	1
E210	22-40		11097840	Spring	1
E220	22-40		1745296	Spring guide	1
E260	22-40		11097840	Spring	1
E270	22-40		1745296	Spring guide	1
E400	22-40		1030932-SA	Plug assembly	1
E410	22-40		1030932-SA	Plug assembly	1
QE401	22-40		11231264	Loop flushing spool assembly	1
QE411	22-40		11231266	Loop flushing spool assembly	1
QE430	22-40		9004201-3700	O-ring	2

### Order code: SB3 (inch)

E100	22-40		11288764	Endcap, inch	1
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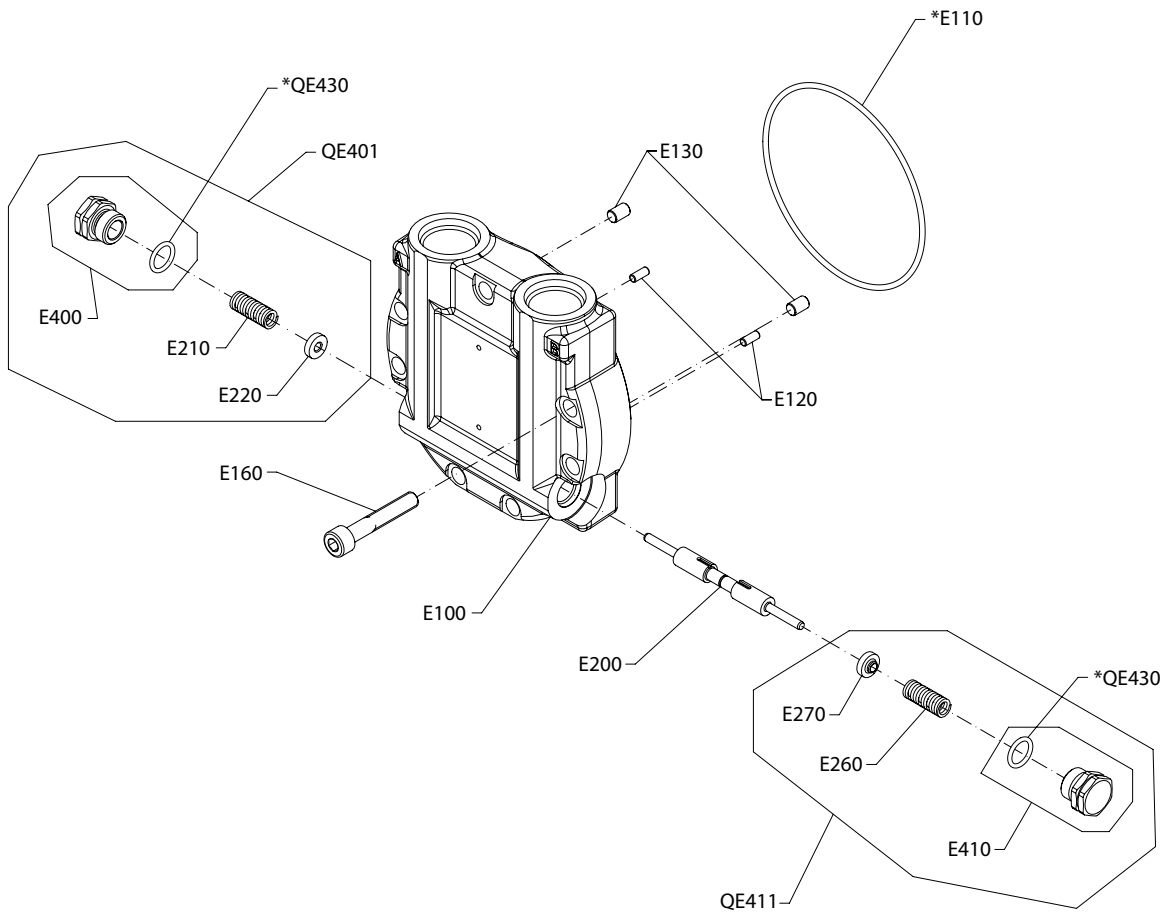
### Order code: MB3 (metric)

E100	22-40		11288765	Endcap, metric	1
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**Porting type**

**MP1M porting type SB4, MB4**

*Parts configuration*



P400765

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		133295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E200	22-40		11288788	Loop flushing spool	1
E210	22-40		11097840	Spring	2
E220	22-40		1745296	Spring guide	2
E260	22-40		11097840	Spring	1
E270	22-40		1745296	Spring guide	1
E400	22-40		1030932-SA	Plug assembly	1
E410	22-40		1030932-SA	Plug assembly	1
QE401	22-40		11231264	Loop flushing spool assembly	1
QE411	22-40		11231266	Loop flushing spool assembly	1
QE430	22-40		9004201-3700	O-ring	2

### Order code: SB4 (inch)

E100	22-40		11288764	Endcap, inch	1
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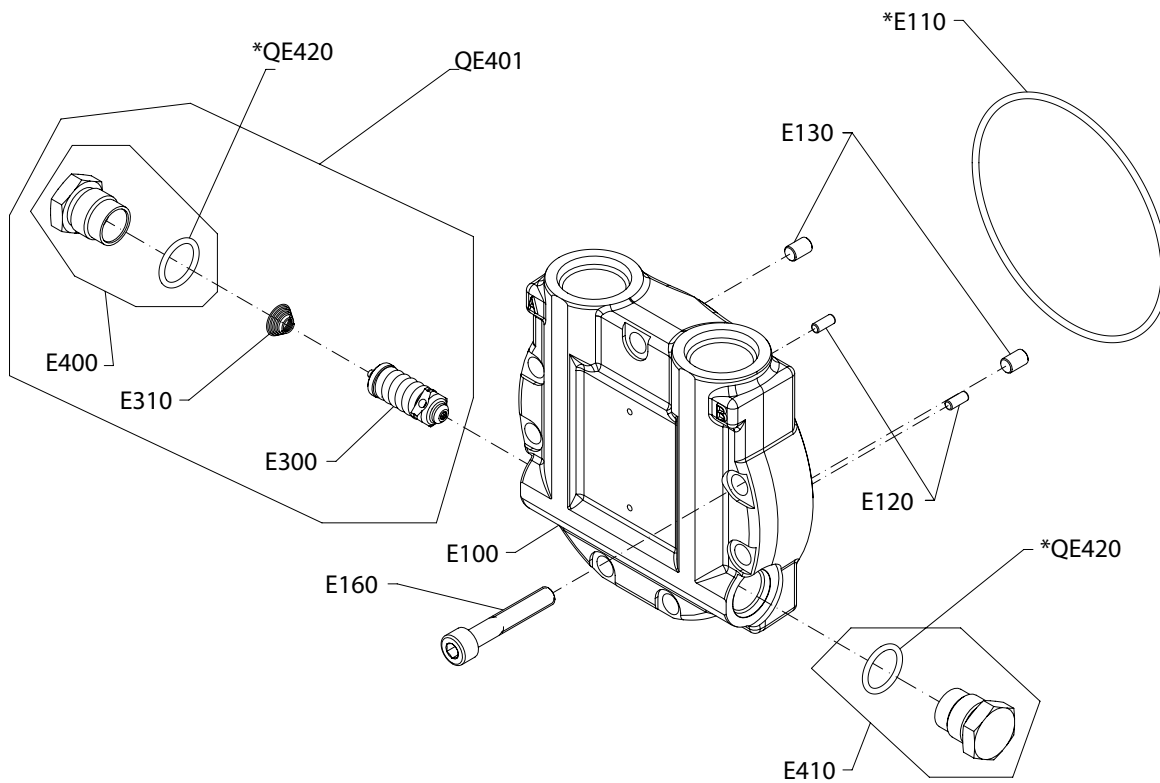
### Order code: MB4 (metric)

E100	22-40		11288765	Endcap, metric	1
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**Porting type**

**MP1M porting type SC1, MC1**

*Parts configuration*



P400766

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		733295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E300	22-40		3103375-0280	Valve assembly	1
E310	22-40		11192689	Compressed spring	1
E400	22-40		11229004	Plug assembly	1
E410	22-40		11229004	Plug assembly	1
QE401	22-40		11231269	Anti-cavitation valve assembly	1
QE420	22-40		9004201-5000	O-ring	2

### Order code: SC1 (inch)

E100	22-40		11288766	Endcap, inch	1
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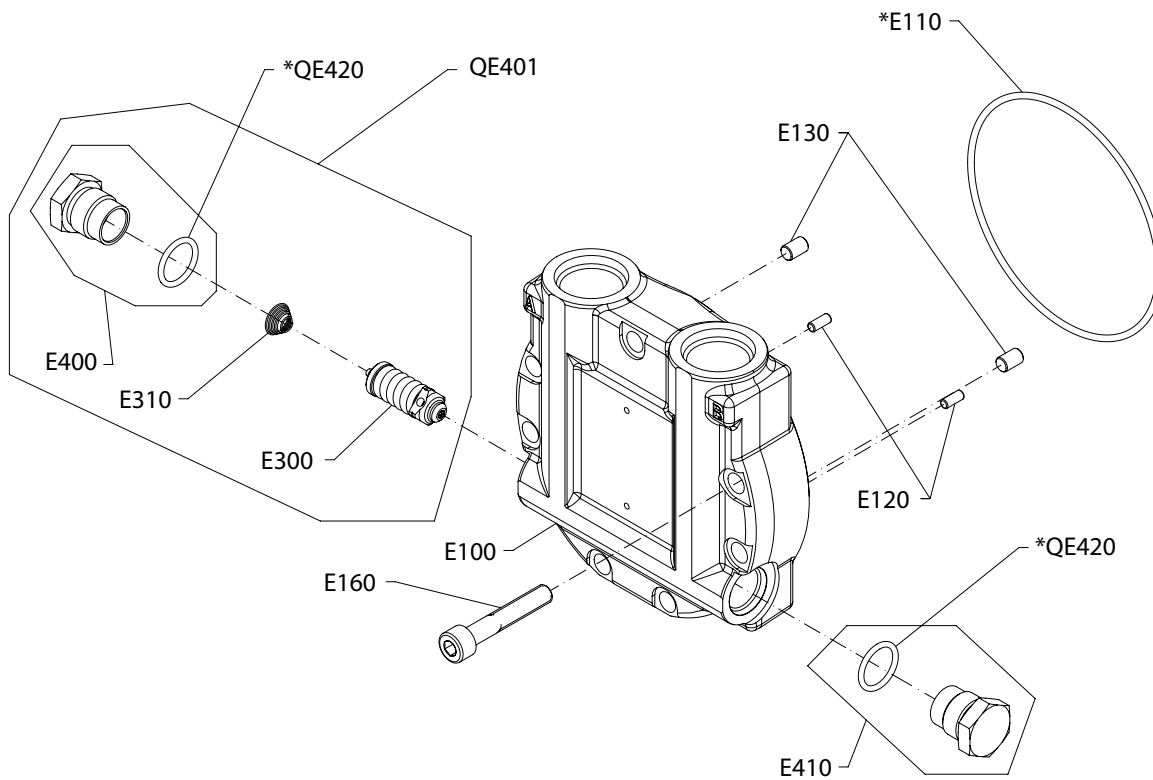
### Order code: MC1 (metric)

E100	22-40		11288767	Endcap, metric	1
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**Porting type**

**MP1M porting type SC2, MC2**

*Parts configuration*



P400767

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		733295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E300	22-40		3103375-0345	Valve assembly	1
E310	22-40		11192689	Compressed spring	1
E400	22-40		11229004	Plug assembly	1
E410	22-40		11229004	Plug assembly	1
QE401	22-40		11231270	Anti-cavitation valve assembly	1
QE420	22-40		9004201-5000	O-ring	2

### Order code: SC2 (inch)

E100	22-40		11288766	Endcap, inch	1
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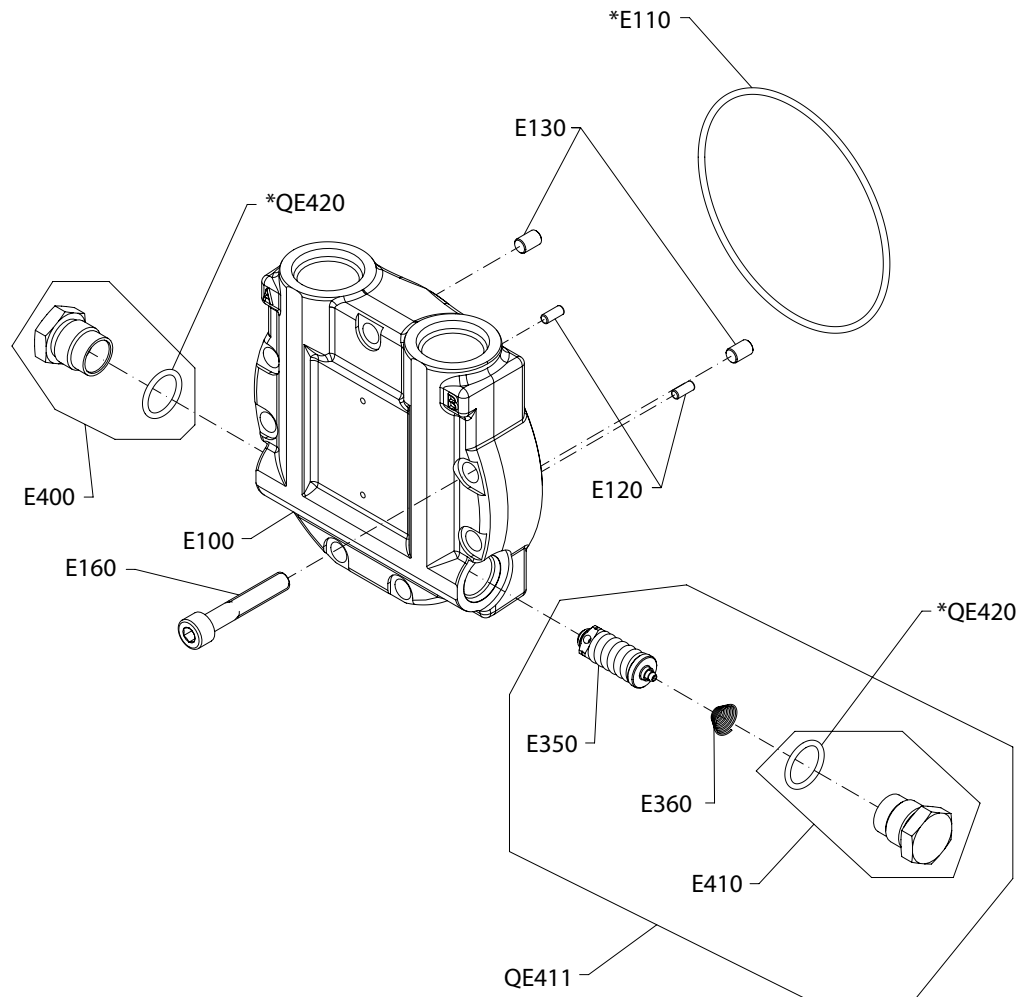
### Order code: MC2 (metric)

E100	22-40		11288767	Endcap, metric	1
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Porting type

MP1M porting type SD1, MD1

Parts configuration



P400768

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

### Porting type

#### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		733295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E350	22-40		3103375-0280	Valve assembly	1
E360	22-40		11192689	Compressed spring	1
E400	22-40		11229004	Plug assembly	1
E410	22-40		11229004	Plug assembly	1
QE411	22-40		11231412	Anti-cavitation valve assembly	1
QE420	22-40		9004201-5000	O-ring	2

#### Order code: SD1 (inch)

E100	22-40		11288766	Endcap, inch	1
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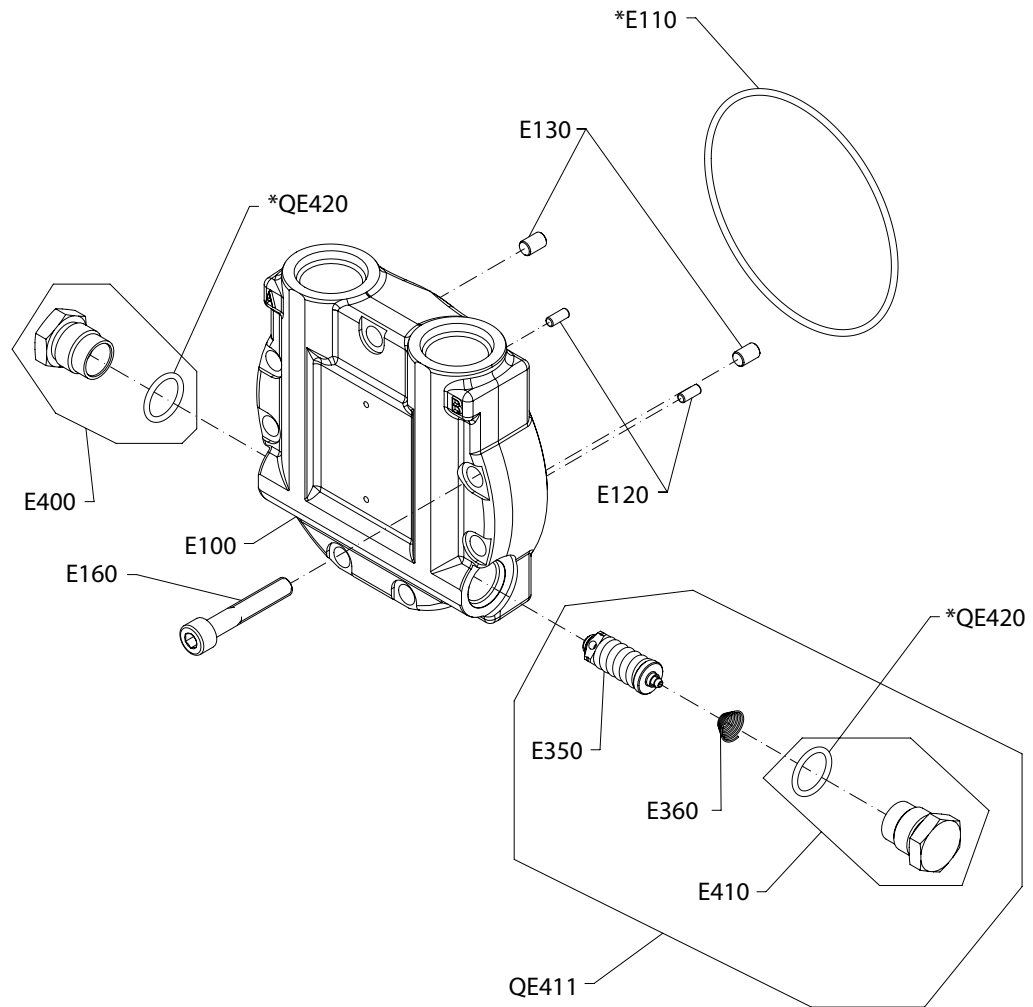
#### Order code: MD1 (metric)

E100	22-40		11288767	Endcap, metric	1
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**Porting type**

**MP1M porting type SD2, MD2**

*Parts configuration*



P400769

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	22-40		733295	O-ring	1
E120	22-40		9004800-1506	Straight pin	2
E130	22-40		9004800-2506	Straight pin	2
E160	22-40		376624	Screw	7
E350	22-40		3103375-0345	Valve assembly	1
E360	22-40		11192689	Compressed spring	1
E400	22-40		11229004	Plug assembly	1
E410	22-40		11229004	Plug assembly	1
QE411	22-40		11231413	Anti-cavitation valve assembly	1
QE420	22-40		9004201-5000	O-ring	2

### Order code: SD2 (inch)

E100	22-40		11288766	Endcap, inch	1
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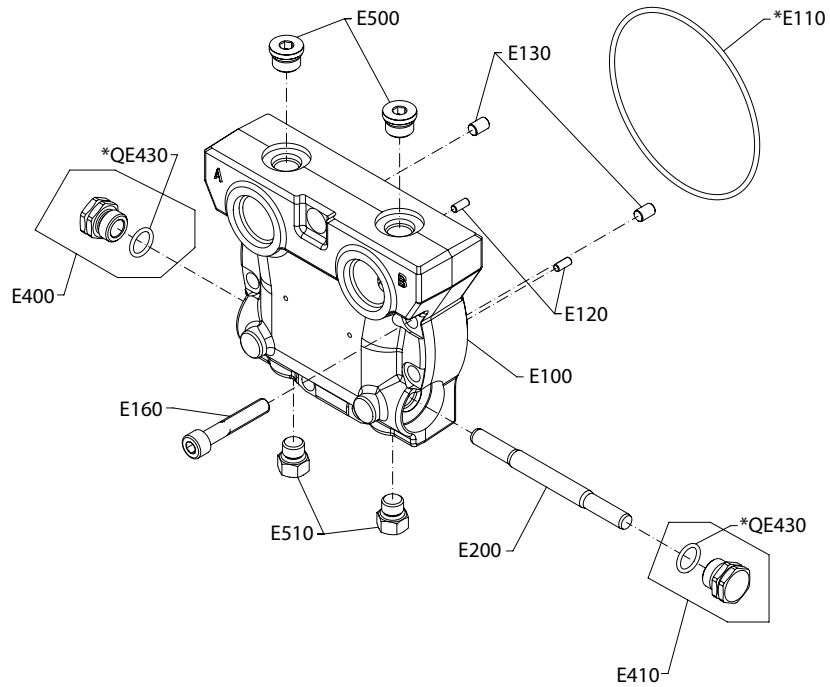
### Order code: MD2 (metric)

E100	22-40		11288767	Endcap, metric	1
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**Porting type**

**MP1M porting type SF1, MF1**

*Parts configuration*



P400792

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

### Porting type

#### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E200	23-39		11098213	Loop flushing spool, defeated	1
E400	23-39		1030932-SA	Plug assembly	1
E410	23-39		1030932-SA	Plug assembly	1
QE430	23-39		9004201-3700	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

#### Order code: SF1 (inch)

E100	23-39		11288768	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

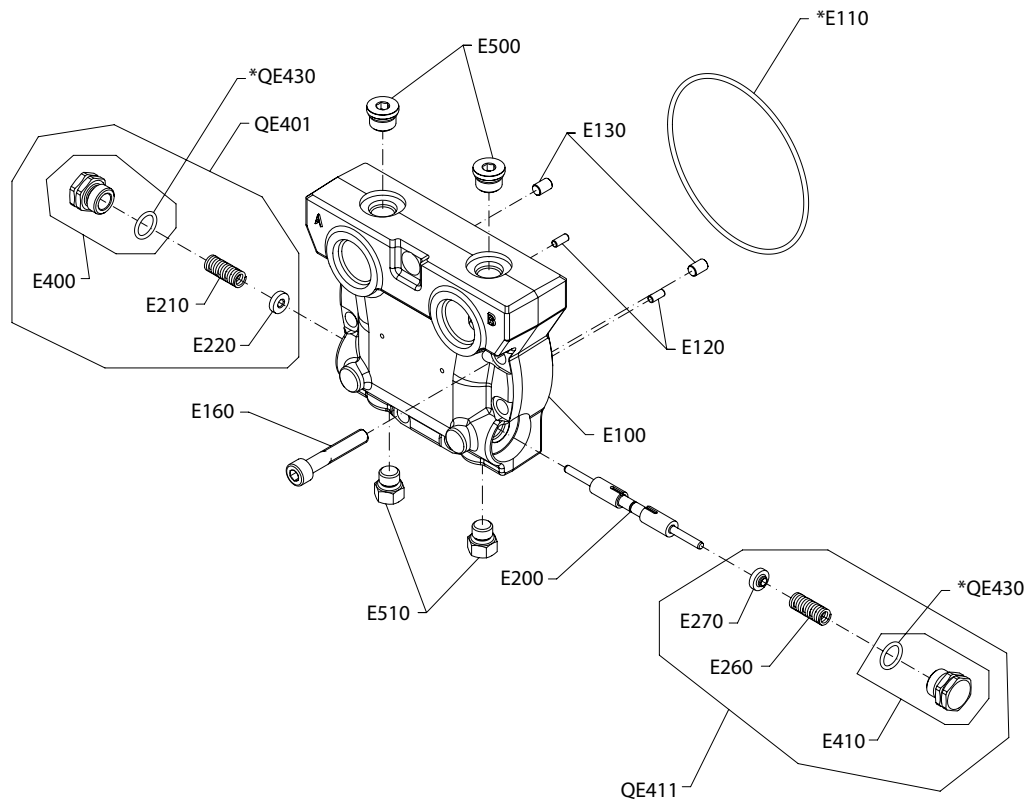
#### Order code: MF1 (metric)

E100	23-39		11288769	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

**Porting type**

**MP1M porting type SG3, MG3**

*Parts configuration*



P400790

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E200	23-39		11120528	Loop flushing spool	1
E210	23-39		11097840	Spring	1
E220	23-39		1745296	Spring guide	1
E260	23-39		11097840	Spring	1
E270	23-39		1745296	Spring guide	1
E400	23-39		1030932-SA	Plug assembly	1
E410	23-39		1030932-SA	Plug assembly	1
QE401	23-39		11231264	Loop flushing spool assembly	1
QE411	23-39		11231266	Loop flushing spool assembly	1
QE430	23-39		9004201-3700	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

### Order code: SG3 (inch)

E100	23-39		11288768	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

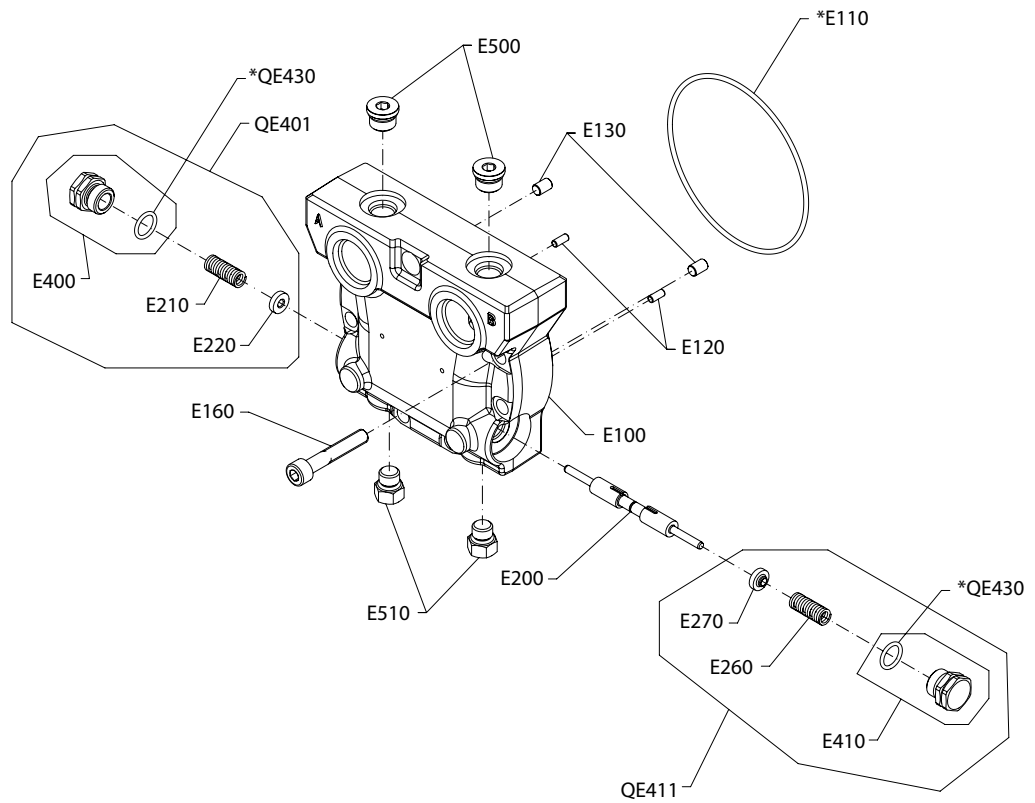
### Order code: MG3 (metric)

E100	23-39		11288769	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

**Porting type**

**MP1M porting type SG4, MG4**

*Parts configuration*



P400790

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E200	23-39		11288788	Loop flushing spool	1
E210	23-39		11097840	Spring	1
E220	23-39		1745296	Spring guide	1
E260	23-39		11097840	Spring	1
E270	23-39		1745296	Spring guide	1
E400	23-39		1030932-SA	Plug assembly	1
E410	23-39		1030932-SA	Plug assembly	1
QE401	23-39		11231264	Loop flushing spool assembly	1
QE411	23-39		11231266	Loop flushing spool assembly	1
QE430	23-39		9004201-3700	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

### Order code: SG4 (inch)

E100	23-39		11288768	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

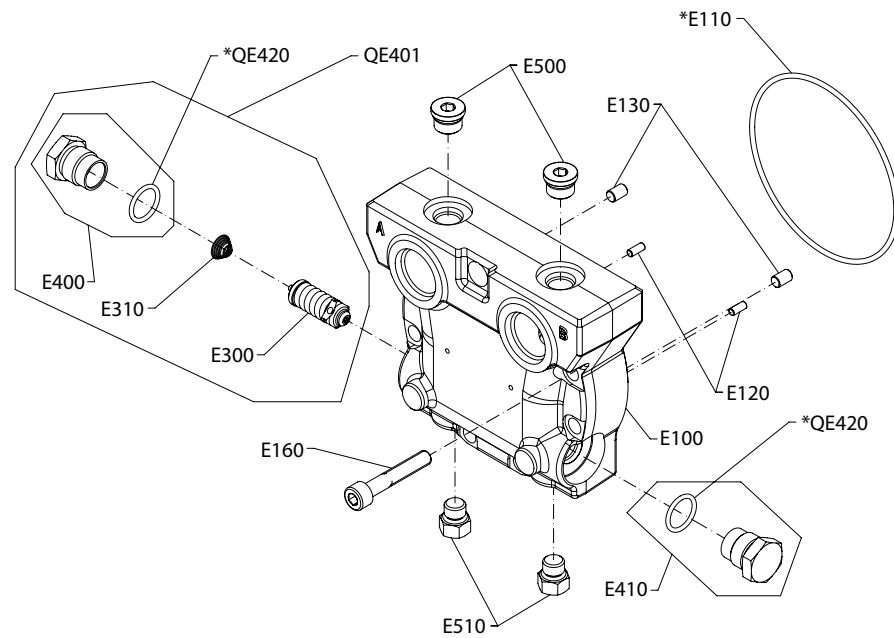
### Order code: MG4 (metric)

E100	23-39		11288769	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

Porting type

MP1M porting type SH1, MH1

Parts configuration



P400793

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E300	23-39		3103375-0280	Valve assembly	1
E310	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE401	23-39		11231269	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

### Order code: SH1 (inch)

E100	23-39		11288770	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

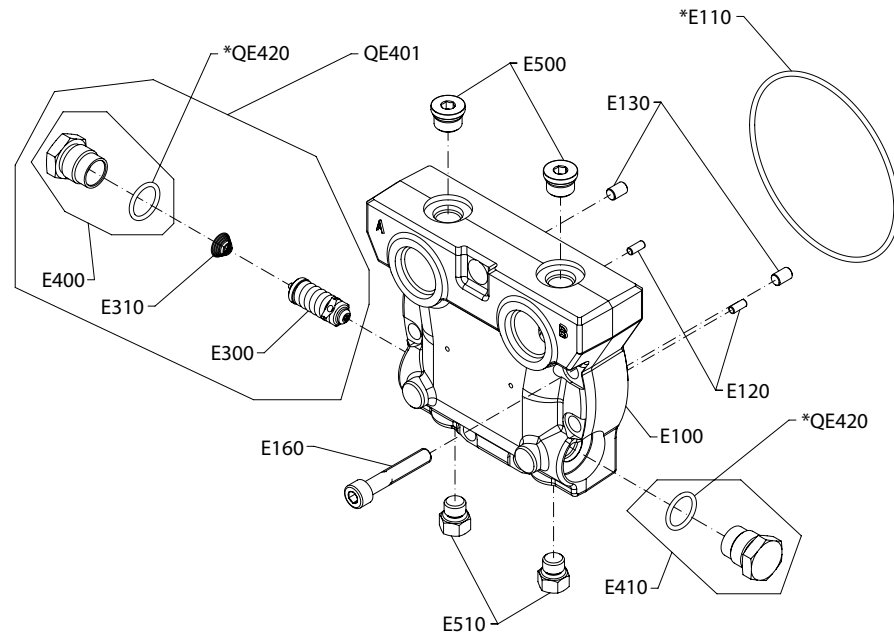
### Order code: MH1 (metric)

E100	23-39		11288771	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

Porting type

MP1M porting type SH2, MH2

Parts configuration



P400793

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E300	23-39		3103375-0345	Valve assembly	1
E310	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE401	23-39		11231270	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

### Order code: SH2 (inch)

E100	23-39		11288770	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

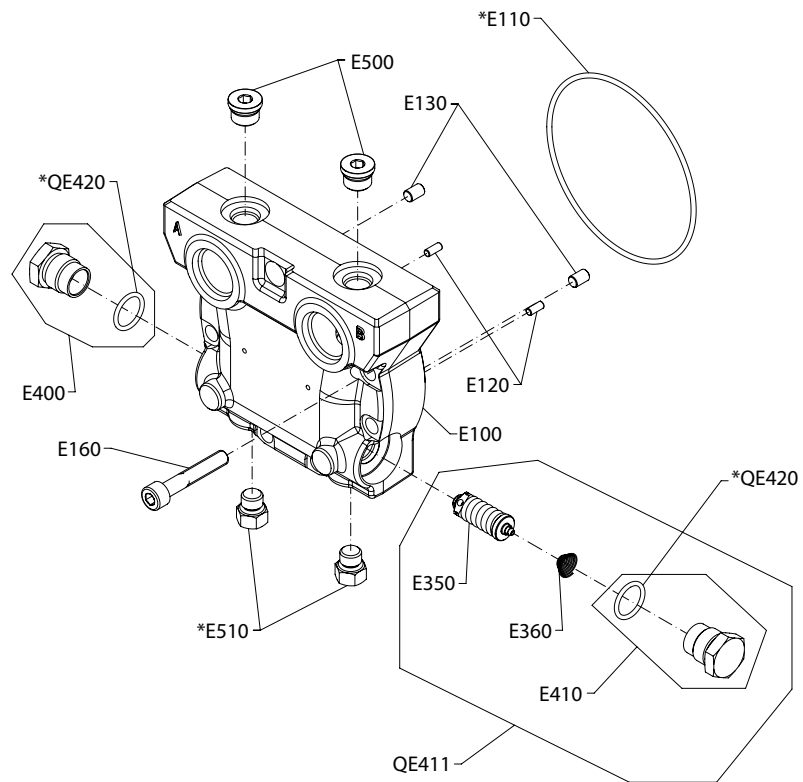
### Order code: MH2 (metric)

E100	23-39		11288771	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

Porting type

MP1M porting type SJ1, MJ1

Parts configuration



P400791

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E350	23-39		3103375-0280	Valve assembly	1
E360	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE411	23-39		11231269	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

### Order code: SJ1 (inch)

E100	23-39		11288770	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

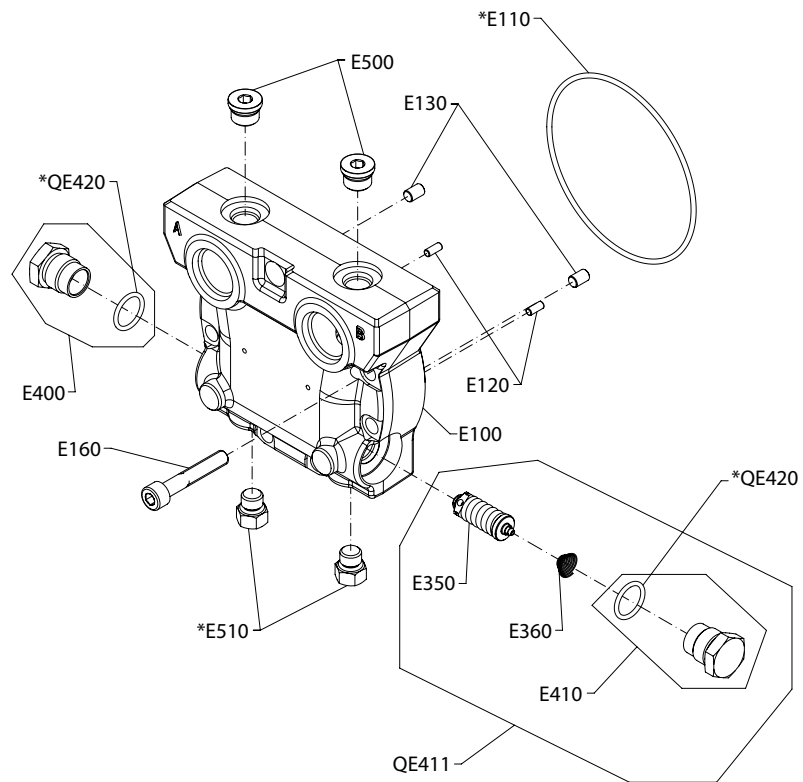
### Order code: MJ1 (metric)

E100	23-39		11288771	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

Porting type

MP1M porting type SJ2, MJ2

Parts configuration



P400791

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Porting type

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E350	23-39		3103375-0345	Valve assembly	1
E360	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE411	23-39		11231270	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

### Order code: SJ2 (inch)

E100	23-39		11288770	Endcap, inch	1
E500	23-39		J9005110-5600	Plug assembly	2

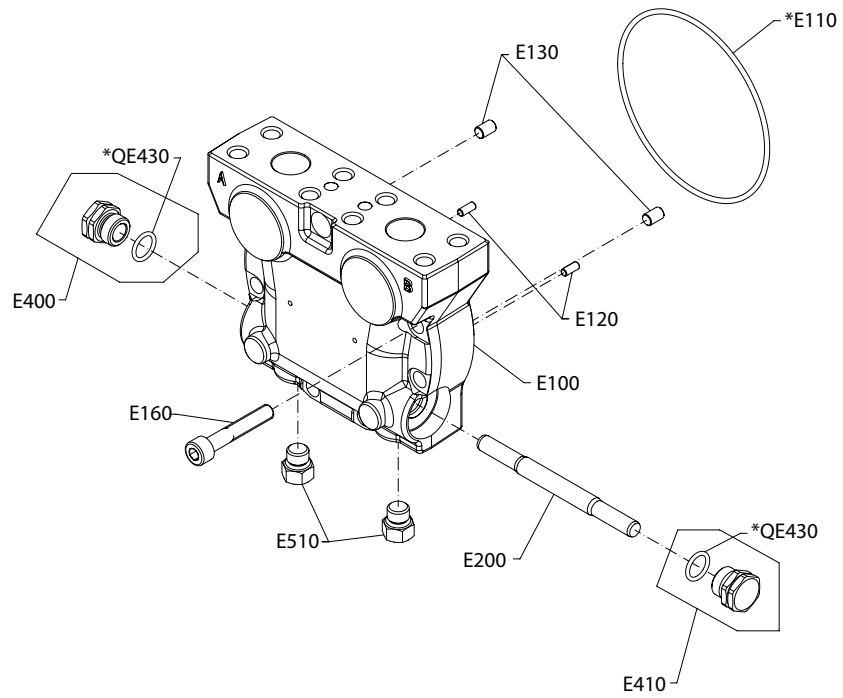
### Order code: MJ2 (metric)

E100	23-39		11288771	Endcap, metric	1
E500	23-39		5000438	Plug assembly	2

Porting type

MP1M porting type FA1

Parts configuration



P400796

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



**Porting type**

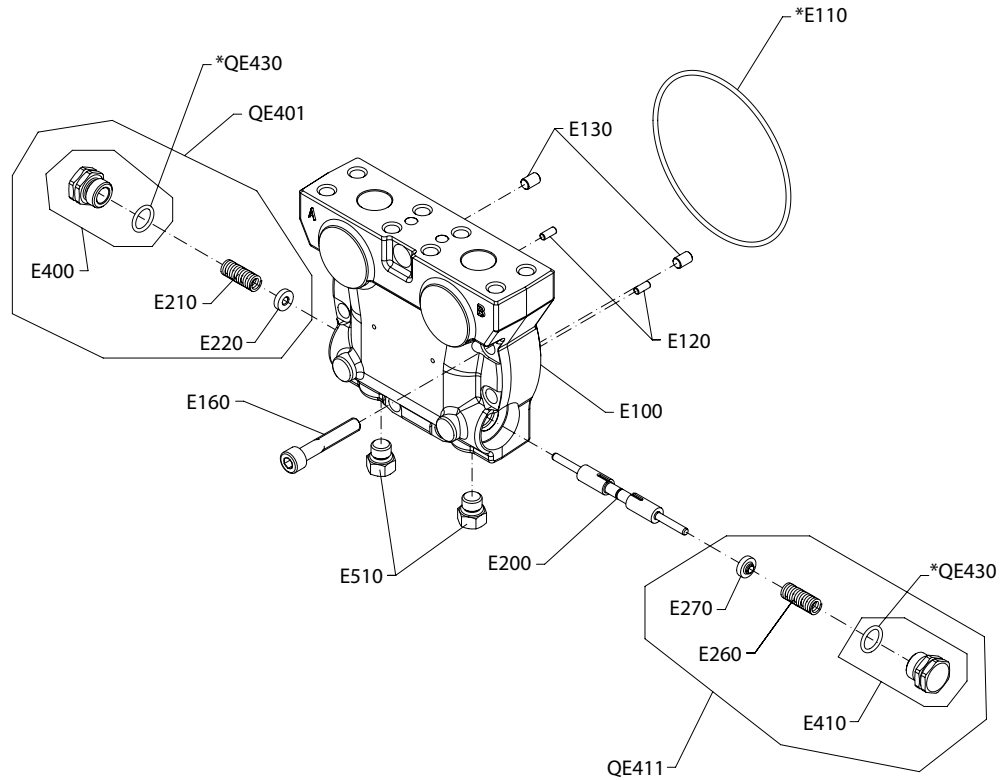
Order code: FA1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288782	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E200	23-39		11098213	Loop flushing spool, defeated	1
E400	23-39		1030932-SA	Plug assembly	1
E410	23-39		1030932-SA	Plug assembly	1
QE430	23-39		9004201-3700	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

**Porting type**

**MP1M porting type FB3**

*Parts configuration*



P400795

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

### Porting type

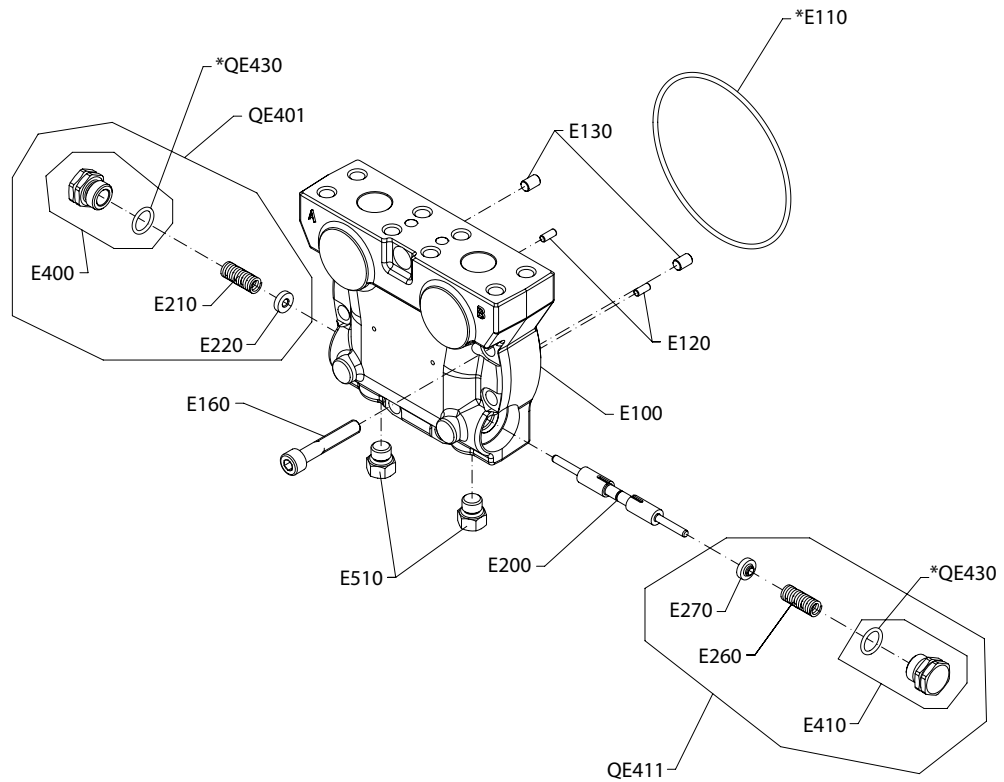
Order code: FB3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288782	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E200	23-39		11120528	Loop flushing spool	1
E210	23-39		11097840	Spring	1
E220	23-39		1745296	Spring guide	1
E260	23-39		11097840	Spring	1
E270	23-39		1745296	Spring guide	1
E400	23-39		1030932-SA	Plug assembly	1
E410	23-39		1030932-SA	Plug assembly	1
QE401	23-39		11231264	Loop flushing spool assembly	1
QE411	23-39		11231266	Loop flushing spool assembly	1
QE430	23-39		9004201-3700	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

**Porting type**

**MP1M porting type FB4**

*Parts configuration*



P400795

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

**Porting type**

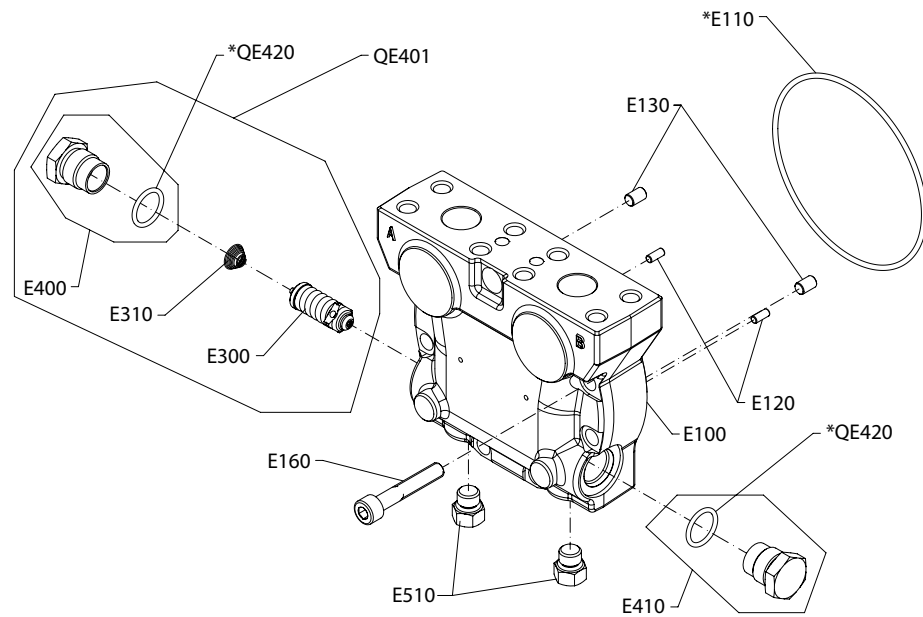
Order code: FB4

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288782	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E200	23-39		11288788	Loop flushing spool	1
E210	23-39		11097840	Spring	1
E220	23-39		1745296	Spring guide	1
E260	23-39		11097840	Spring	1
E270	23-39		1745296	Spring guide	1
E400	23-39		1030932-SA	Plug assembly	1
E410	23-39		1030932-SA	Plug assembly	1
QE401	23-39		11231264	Loop flushing spool assembly	1
QE411	23-39		11231266	Loop flushing spool assembly	1
QE430	23-39		9004201-3700	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

Porting type

MP1M porting type FC1

Parts configuration



P400797

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

**Porting type**

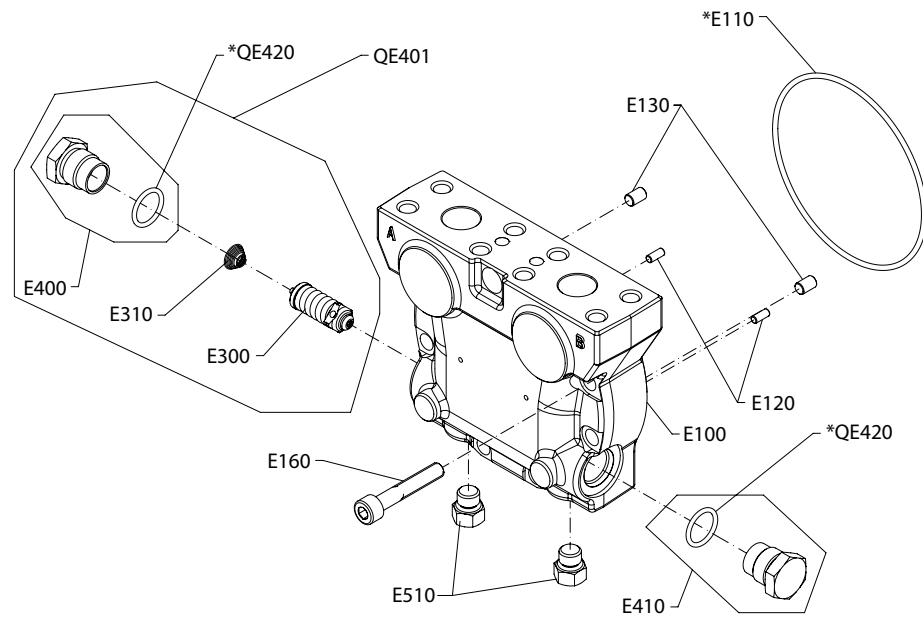
Order code: FC1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288784	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E300	23-39		3103375-0280	Valve assembly	1
E310	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE401	23-39		1745296	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

Porting type

MP1M porting type FC2

Parts configuration



P400797

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



### Porting type

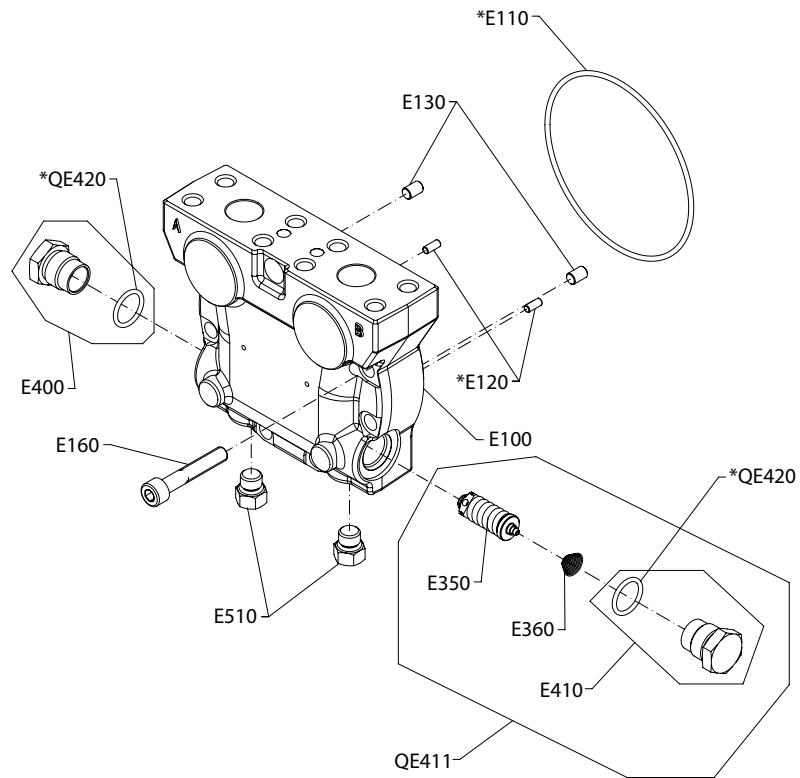
Order code: FC2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288784	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E300	23-39		3103375-0345	Valve assembly	1
E310	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE401	23-39		11231269	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

Porting type

MP1M porting type FD1

Parts configuration



P400794

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

**Porting type**

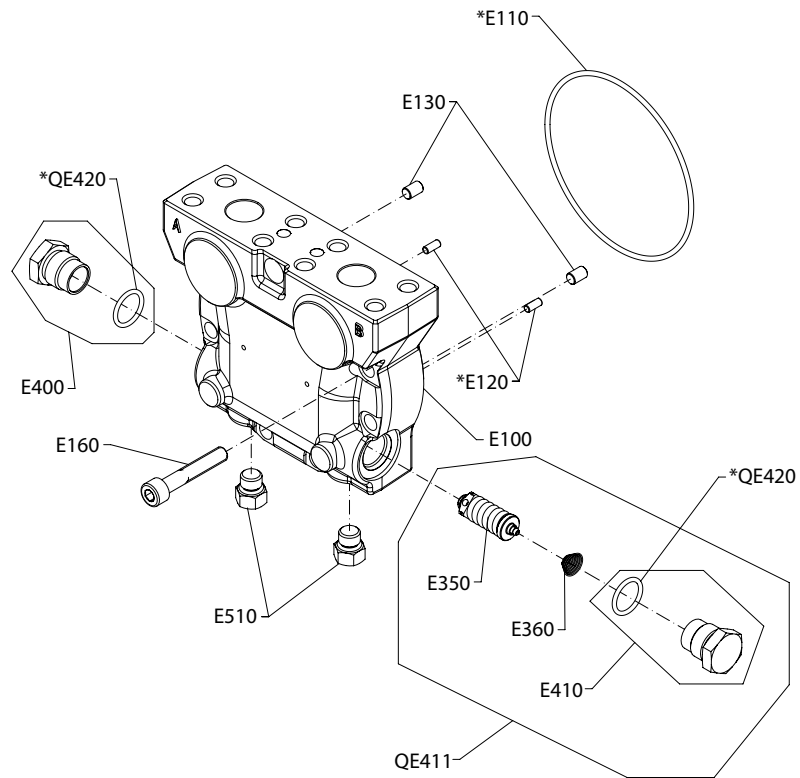
Order code: *FD1*

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288784	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E350	23-39		3103375-0280	Valve assembly	1
E360	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE411	23-39		11231269	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

Porting type

MP1M porting type FD2

Parts configuration



P400794

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

**Porting type**

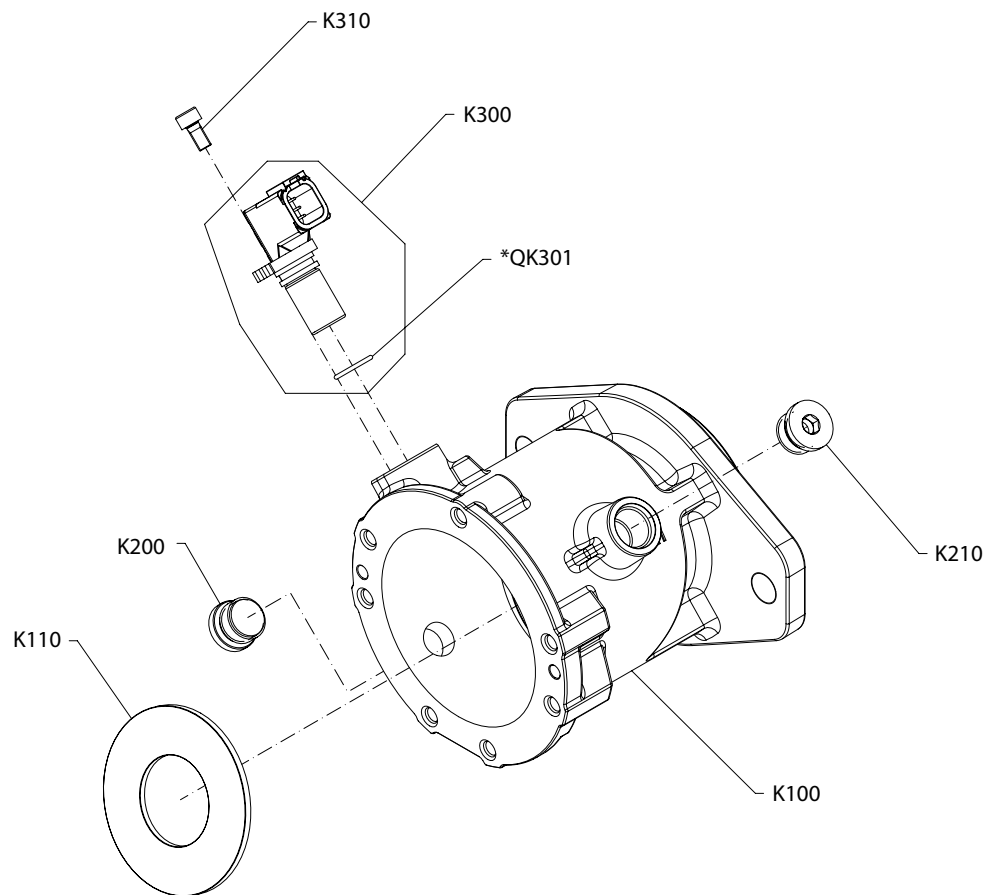
Order code: FD2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E100	23-39		11288784	Endcap	1
E110	23-39		733295	O-ring	1
E120	23-39		9004800-1506	Straight pin	2
E130	23-39		9004800-2506	Straight pin	2
E160	23-39		376624	Screw	7
E350	23-39		3103375-0345	Valve assembly	1
E360	23-39		11192689	Compressed spring	1
E400	23-39		11229004	Plug assembly	1
E410	23-39		11229004	Plug assembly	1
QE411	23-39		11231269	Anti-cavitation valve assembly	1
QE420	23-39		9004201-5000	O-ring	2
E510	23-39		9005100-4400	Plug assembly	2

## Housing

### MP1M housing BA, BC, EA, EC

Parts configuration



P400770

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Housing

Order code: BA, EA

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		149055	Speed and temperature sensor 4.5 - 8V	1
K310	22-40		503674	Screw	1
QK301	22-40		11013397	O-ring	1

Order code: BC, EC

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		11232698	Speed and temperature sensor 7 - 32V	1
K310	22-40		503674	Screw	1
QK301	22-40		11013397	O-ring	1

Order code: BA, BC (inch)

K100	22-40		11288789	Housing, SAE-B, inch	1
K200	22-40		J9005110-7500	Plug assembly	1
K210	22-40		J9005110-7500	Plug assembly	1

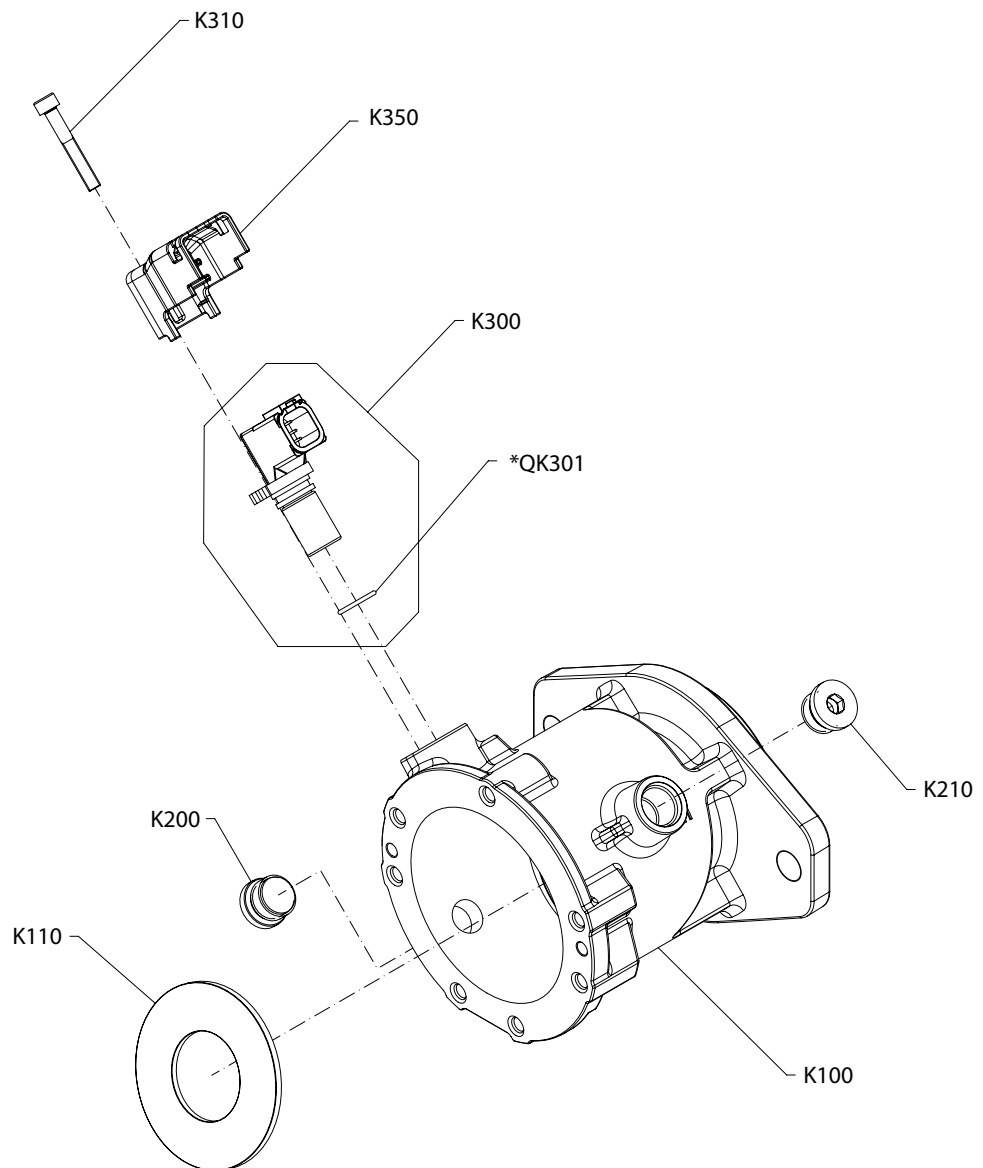
Order code: EA, EC (metric)

K100	22-40		11288790	Housing, SAE-B, metric	1
K200	22-40		5000570	Plug assembly	1
K210	22-40		5000570	Plug assembly	1

## Housing

### MP1M housing BB, BD, EB, ED

Parts configuration



P400771

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



## Housing

Order code: BB, EB

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		149055	Speed and temperature sensor 4.5 - 8V	1
K310	22-40		11158928	Screw	1
K350	22-40		11187156	Sensor cover	1
QK301	22-40		11013397	O-ring	1

Order code: BD, ED

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		11232698	Speed and temperature sensor 7 - 32V	1
K310	22-40		11158928	Screw	1
K350	22-40		11187156	Sensor cover	1
QK301	22-40		11013397	O-ring	1

Order code: BB, BD (inch)

K100	22-40		11288789	Housing, SAE-B, inch	1
K200	22-40		J9005110-7500	Plug assembly	1
K210	22-40		J9005110-7500	Plug assembly	1

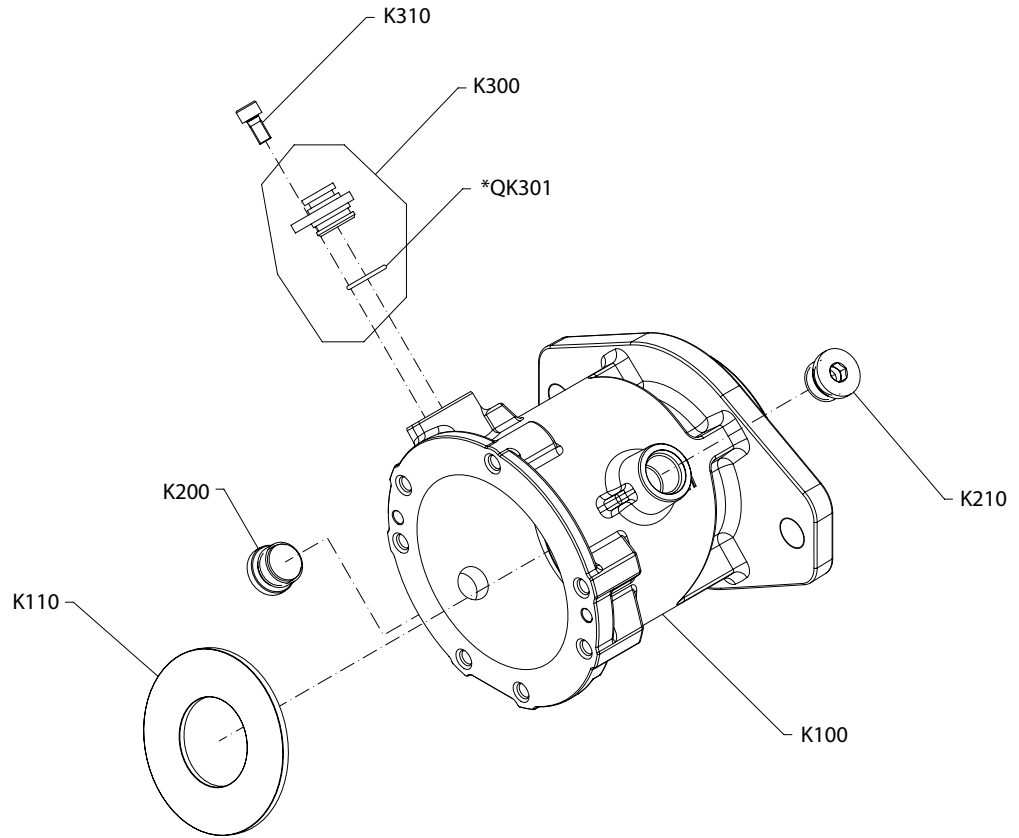
Order code: EB, ED (metric)

K100	22-40		11288790	Housing, SAE-B, metric	1
K200	22-40		5000570	Plug assembly	1
K210	22-40		5000570	Plug assembly	1

## Housing

### MP1M housing BN, EN

Parts configuration



P400772

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Housing

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		11013290	Plug	1
K310	22-40		503674	Screw	1
QK301	22-40		11013397	O-ring	1

### Order code: BN (inch)

K100	22-40		11288789	Housing, SAE-B, inch	1
K200	22-40		J9005110-7500	Plug assembly	1
K210	22-40		J9005110-7500	Plug assembly	1

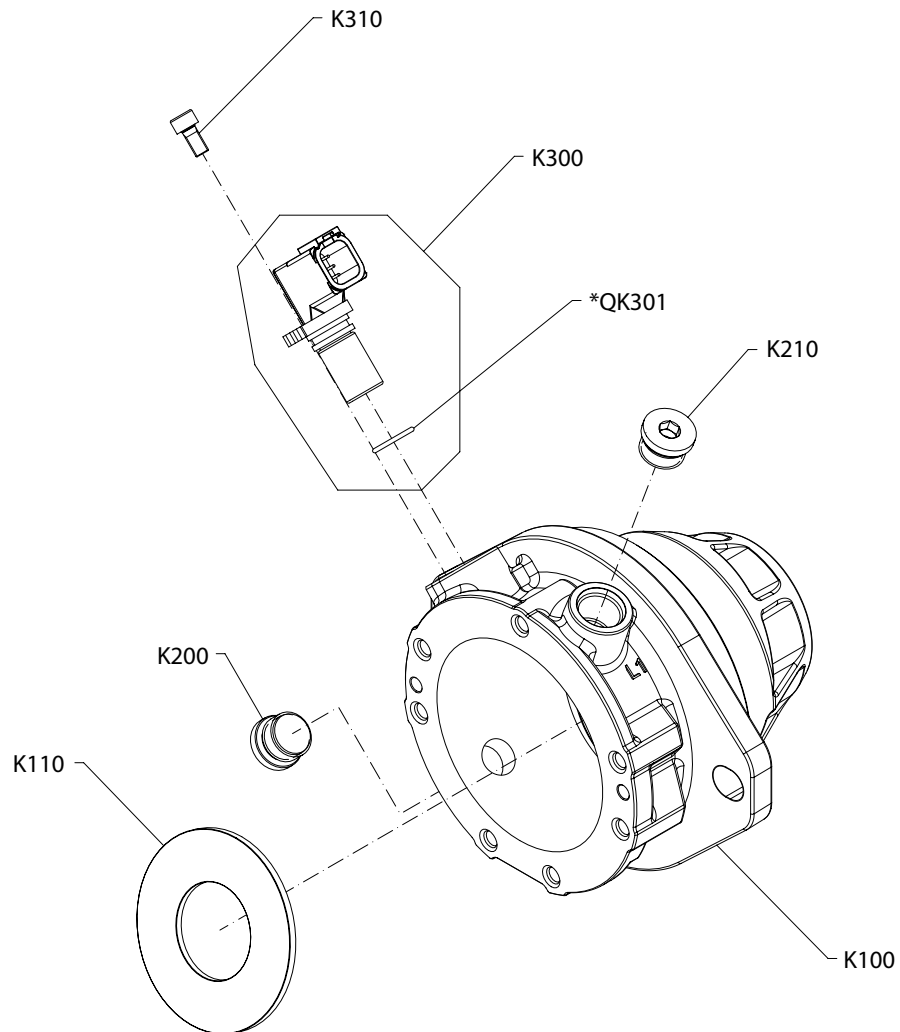
### Order code: EN (metric)

K100	22-40		11288790	Housing, SAE-B, metric	1
K200	22-40		5000570	Plug assembly	1
K210	22-40		5000570	Plug assembly	1

## Housing

### MP1M housing CA, CC, FA, FC

*Parts configuration*



P400773

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Housing

Order code: CA, FA

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		149055	Speed and temperature sensor 4.5 - 8V	1
K310	22-40		503674	Screw	1
QK301	22-40		11013397	O-ring	1

Order code: CC, FC

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		11232698	Speed and temperature sensor 7 - 32V	1
K310	22-40		503674	Screw	1
QK301	22-40		11013397	O-ring	1

Order code: CA, CC (inch)

K100	22-40		11288802	Housing, cartridge, inch	1
K200	22-40		J9005110-7500	Plug assembly	1
K210	22-40		J9005110-7500	Plug assembly	1

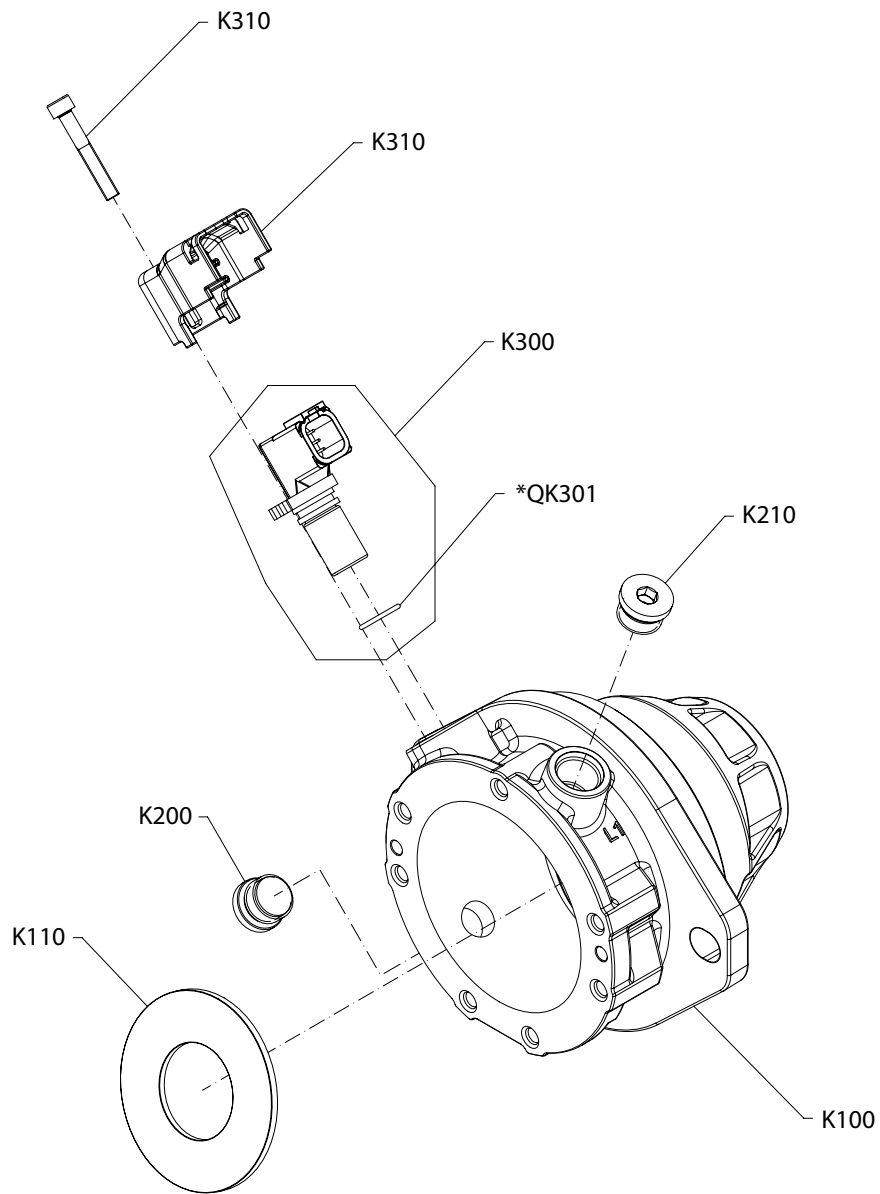
Order code: FA, FC (metric)

K100	22-40		11288803	Housing, cartridge, metric	1
K200	22-40		5000570	Plug assembly	1
K210	22-40		5000570	Plug assembly	1

## Housing

### MP1M housing CB, CD, FB, FD

Parts configuration



P400774

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.

## Housing

Order code: CB, FB

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		149055	Speed and temperature sensor 4.5 - 8V	1
K310	22-40		11158928	Screw	1
K350	22-40		11187156	Sensor cover	1
QK301	22-40		11013397	O-ring	1

Order code: CD, FD

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		11232698	Speed and temperature sensor 7 - 32V	1
K310	22-40		11158928	Screw	1
K350	22-40		11187156	Sensor cover	1
QK301	22-40		11013397	O-ring	1

Order code: CB, CD (inch)

K100	22-40		11288802	Housing, cartridge, inch	1
K200	22-40		J9005110-7500	Plug assembly	1
K210	22-40		J9005110-7500	Plug assembly	1

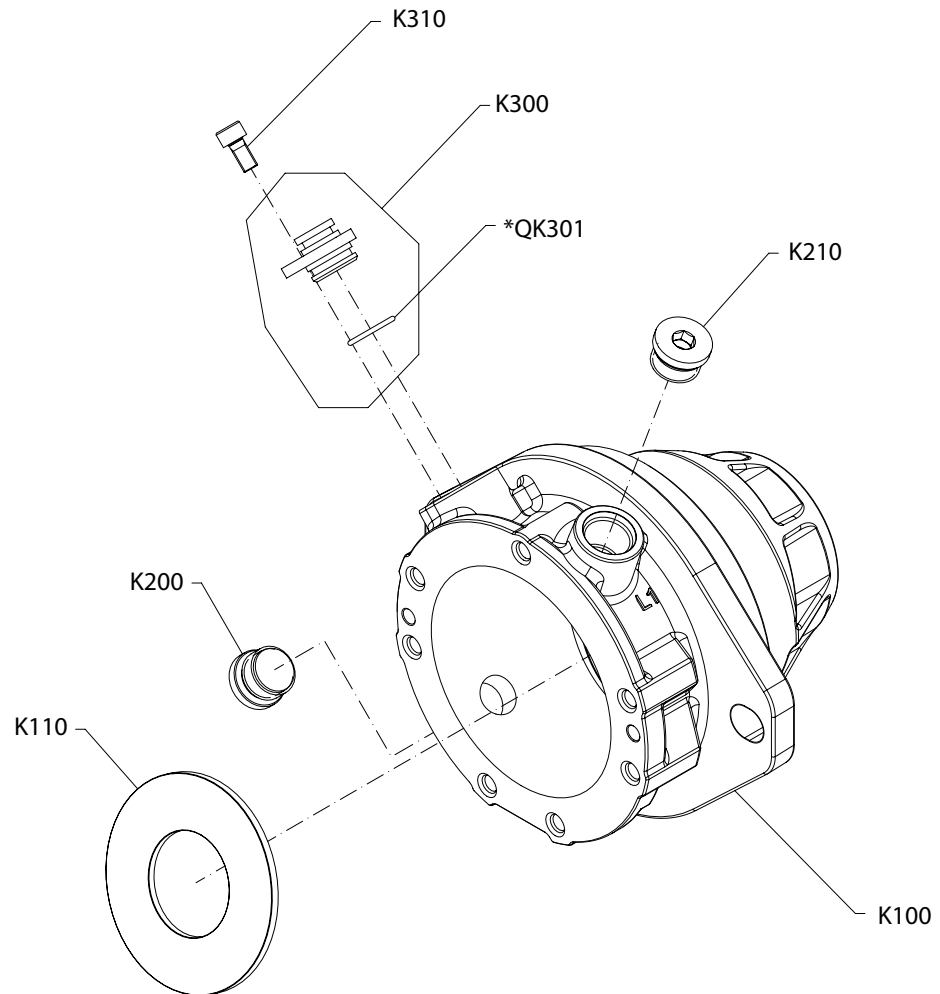
Order code FB, FD (metric)

K100	22-40		11288803	Housing, cartridge, metric	1
K200	22-40		5000570	Plug assembly	1
K210	22-40		5000570	Plug assembly	1

## Housing

### MP1M housing CN, FN

Parts configuration



P400775

\* Included in overhaul seal kit Q210

This option is available in inch and metric configurations. Please order accordingly.



## Housing

### Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K110	22-40		1733663	Thrust plate	1
K300	22-40		11013290	Plug	1
K310	22-40		503674	Screw	1
QK301	22-40		11013397	O-ring	1

### Order code: CN (inch)

K100	22-40		11288802	Housing, cartridge, inch	1
K200	22-40		J9005110-7500	Plug assembly	1
K210	22-40		J9005110-7500	Plug assembly	1

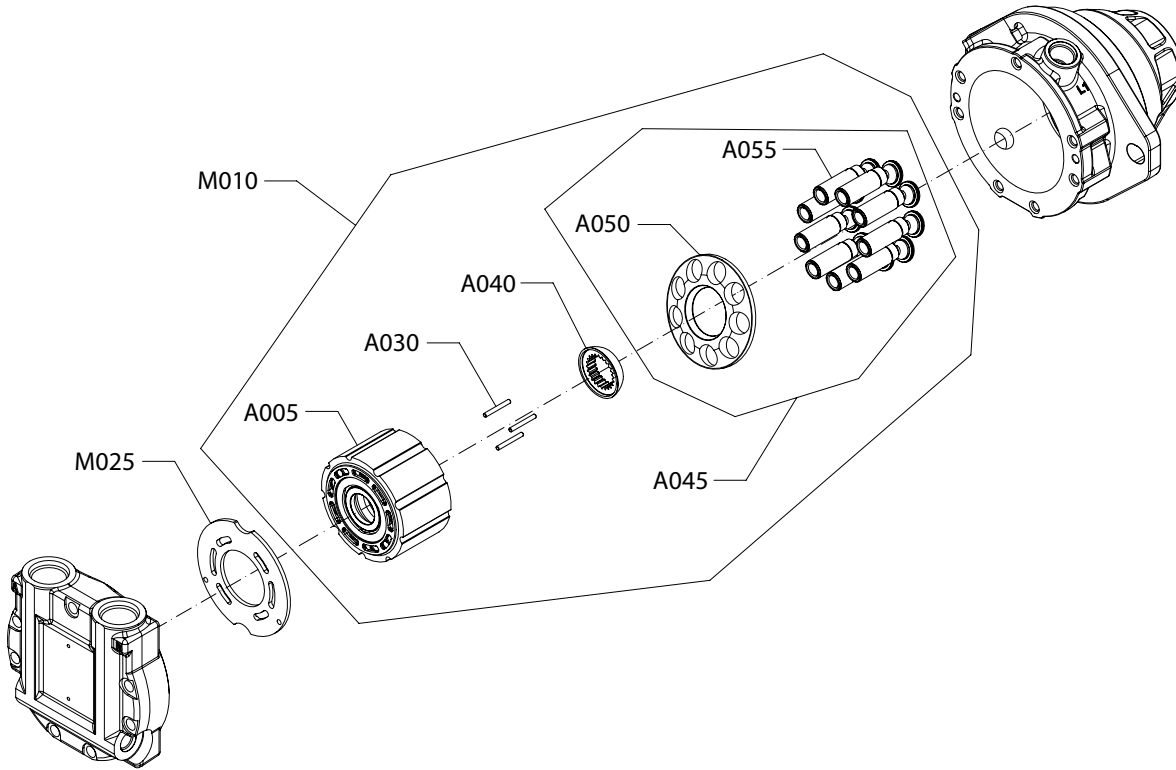
### Order code: FN (metric)

K100	22-40		11288803	Housing, cartridge, metric	1
K200	22-40		5000570	Plug assembly	1
K210	22-40		5000570	Plug assembly	1

### Displacement

#### MP1M displacement 28A, 32A

Parts configuration



P400776

Generic housing and endcap used to show part location only.

## Displacement

Order code: 28A

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A005	22-40		11223883	Cylinder block assembly	1
A030	22-40		11152764	Slipper hold down pin	3
A040	22-40		11151154	Ball guide	1
A045	22-40		11291942	Piston retainer assembly	1
A050	22-40		11151155	Slipper retainer	1
A055	22-40		11291931	Piston assembly	9
M010	22-40		11291943	Cylinder block kit	1
M025	22-40		11288801	Valve plate	1
Q210	22-40		11300867	Overhaul seal kit	1

Order code: 32A

A005	22-40		11223889	Cylinder block assembly	1
A030	22-40		11152764	Slipper hold down pin	3
A040	22-40		11151154	Ball guide	1
A045	22-40		11291945	Piston retainer assembly	1
A050	22-40		11151155	Slipper retainer	1
A055	22-40		11291946	Piston assembly	9
M010	22-40		11291944	Cylinder block kit	1
M025	22-40		11288801	Valve plate	1
Q210	22-40		11300867	Overhaul seal kit	1

**Overhaul seal kit**

**MP1M 28/32 Seal Kit**

*Seal kit*

<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
D130	22-40		11165487	Lip seal	1
D200	22-40		11288763	Dust seal	1
E110	22-40		733295	O-ring	1
QK301	22-40		11013397	O-ring	1
QE420	22-40		9004201-5000	O-ring	2
QE430	22-40		9004201-3700	O-ring	2

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