

# MTR 8, MTRE 8

New pump types including replacement guide for SPK 8

## Immersible pumps

60 Hz NEMA

50 Hz IEC



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## 1. Product description



Fig. 1 MTR and MTRE pumps

MTR and MTRE pumps are vertical multistage centrifugal pumps designed for pumping of cooling lubricants for machine tools, condensate transfer and similar applications.

The pumps are designed to be mounted on top of tanks with the chamber stack immersed in the pumped liquid.

The pumps come in various pump sizes and have various numbers of stages to provide the flow, the pressure and the installation length required. To meet specific depths of tanks or containers, the immersible length of the pump can be varied using empty chambers.

### Pump

The pump has optimized hydraulics, various types of connections, a motor stool, a given number of chambers and various other parts.

The pumps are available in two material versions:

- standard range (A-version) with wetted parts of cast iron and stainless steel
- stainless steel version (I-version) with all wetted parts of AISI 304 stainless steel (EN/DIN 1.4301) or better.

The mounting flange dimensions are according to DIN 5440. The mechanical shaft seal is according to EN 12756.

### Motor

#### MTR

MTR pumps are fitted with Grundfos standard ML motors.

#### MTRE

MTRE pumps are fitted with E-motor, i.e. a motor with built-in variable frequency drive. This enables continuous variable control of motor speed, which makes it possible to set the pump to operate over a wide range of duty points. The motors on MTRE pumps are Grundfos MLE motors.

MTRE pumps are ideal for machining centers which operate with different machining processes and tools, as this will often require different flows and pressures.

The following features and benefits are typical for choosing an MTRE pump:

- energy savings
- low heat input into the cooling lubricant
- increased cooling efficiency
- better performance of the machining center.

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## 2. Performance curves and technical data

### Introduction to performance curves

#### How to read the curve charts

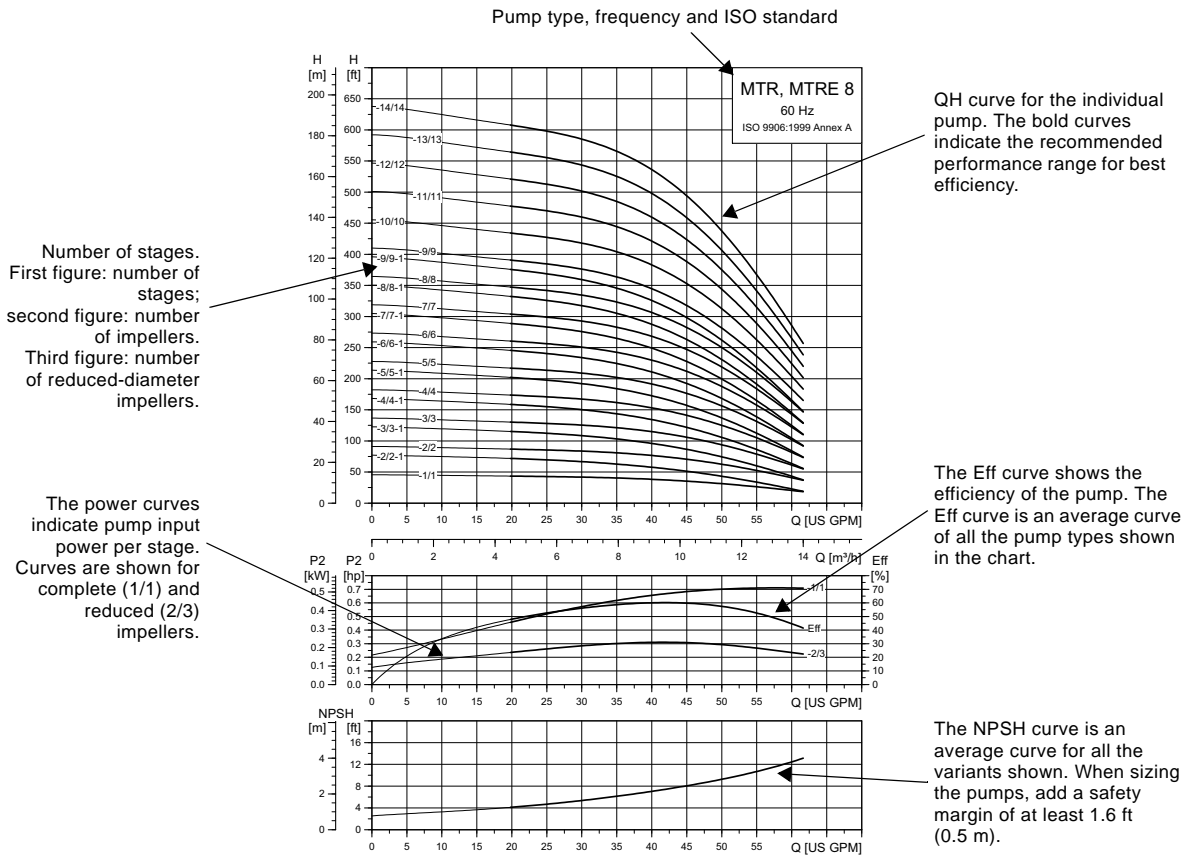


Fig. 2 Example of an MTR, MTRE curve chart

#### Guidelines to performance curves

The guidelines below apply to the curves shown on the following pages:

1. Tolerances to ISO 9906, Annex A, if indicated.
2. The motors used for the measurements are standard Grundfos motors (ML or MLE).
3. Measurements have been made with airless water at a temperature of 68 °F (20 °C).
4. The curves apply to a kinematic viscosity of  $\nu = 1 \text{ mm}^2/\text{s}$  (1 cSt).
5. Due to the risk of overheating, the pumps should not be used at a flow below the minimum flow rate.

QH curves of the individual pumps are based on current motor speeds.

The curve below shows the minimum flow rate as a percentage of the rated flow rate in relation to the liquid temperature.

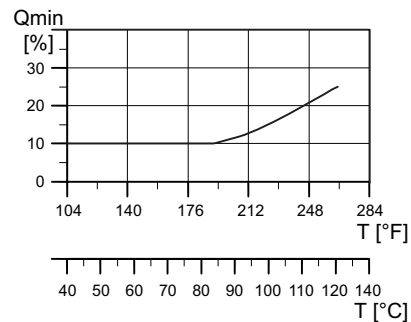
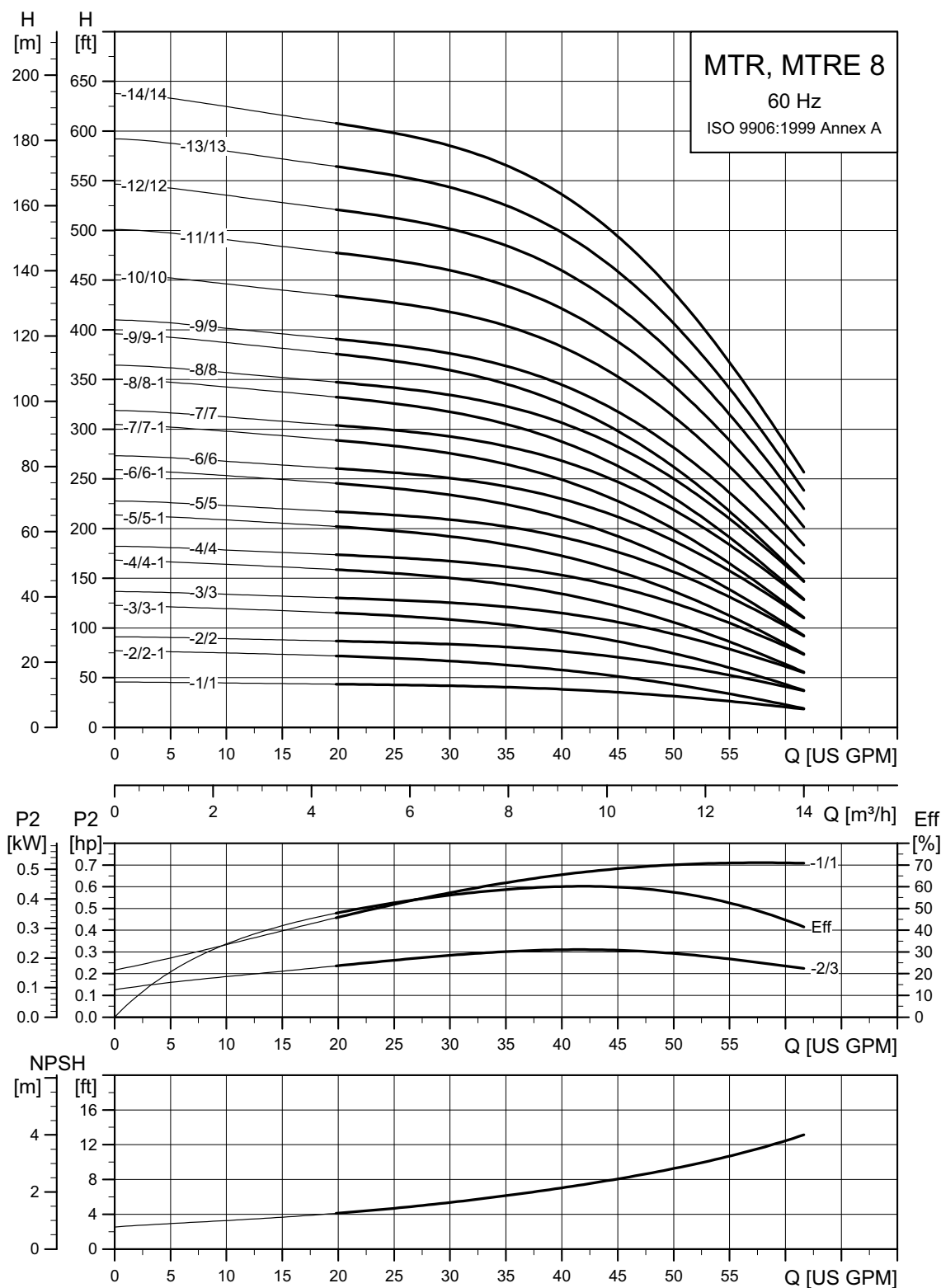


Fig. 3 Minimum flow rate

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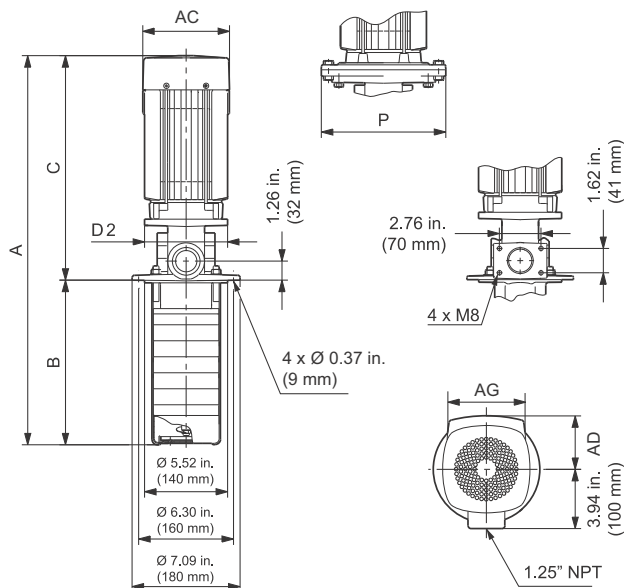
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MTR, MTRE 8, 60 Hz



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Dimensional sketches



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Dimensions and weights MTR 8, 60 Hz NEMA

Pump type	P2 [Hp]	MTR 8, 60 Hz NEMA frame							Net wt [lb (kg)]
		Dimensions [in. (mm)]							
		A	B	C	AC	D2	P	AD	
MTR 8-1/1	0.75	19.81 (503)	7.72 (196)	12.09 (307)	5.55 (141)	6.50 (165)	5.55 (141)	4.57 (116)	42 (19)
MTR 8-2/2-1	1	20.87 (530)	8.78 (223)	12.09 (307)	5.55 (141)	6.50 (165)	5.55 (141)	4.57 (116)	42 (19)
MTR 8-2/2	1.5	22.05 (560)	8.78 (223)	13.27 (337)	5.55 (141)	6.50 (165)	5.55 (141)	4.57 (116)	45 (20)
MTR 8-3/3-1	2	25.71 (653)	9.84 (250)	15.87 (403)	7.01 (178)	6.50 (165)	7.01 (178)	4.33 (110)	65 (29)
MTR 8-3/3	2	25.71 (653)	9.84 (250)	15.87 (403)	7.01 (178)	6.50 (165)	7.01 (178)	4.33 (110)	65 (29)
MTR 8-4/4-1	3	29.30 (744)	10.91 (277)	18.39 (467)	7.01 (178)	9.84 (250)	7.01 (178)	4.33 (110)	84 (38)
MTR 8-4/4	3	29.30 (744)	10.91 (277)	18.39 (467)	7.01 (178)	9.84 (250)	7.01 (178)	4.33 (110)	84 (38)
MTR 8-5/5-1	3	30.36 (771)	11.97 (304)	18.39 (467)	7.01 (178)	9.84 (250)	7.01 (178)	4.33 (110)	84 (38)
MTR 8-5/5	5	32.52 (826)	11.97 (304)	20.55 (522)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	126 (57)
MTR 8-6/6-1	5	33.58 (853)	13.03 (331)	20.55 (522)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	126 (57)
MTR 8-6/6	5	33.58 (853)	13.03 (331)	20.55 (522)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	126 (57)
MTR 8-7/7-1	5	34.64 (880)	14.09 (358)	20.55 (522)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	126 (57)
MTR 8-7/7	5	34.64 (880)	14.09 (358)	20.55 (522)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	126 (57)
MTR 8-8/8-1	5	35.71 (907)	15.16 (385)	20.55 (522)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	126 (57)
MTR 8-8/8	7.5	36.18 (919)	15.16 (385)	21.02 (534)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	146 (66)
MTR 8-9/9-1	7.5	37.24 (946)	16.22 (412)	21.02 (534)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	146 (66)
MTR 8-9/9	7.5	37.24 (946)	16.22 (412)	21.02 (534)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	146 (66)
MTR 8-10/10	7.5	38.30 (973)	17.28 (439)	21.02 (534)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	146 (66)
MTR 8-11/11	7.5	39.37 (1000)	18.35 (466)	21.02 (534)	8.66 (220)	9.84 (250)	8.66 (220)	5.28 (134)	146 (66)
MTR 8-12/12	10	40.12 (1019)	19.41 (493)	20.71 (526)	10.24 (260)	9.84 (250)	8.66 (220)	5.28 (134)	168 (76)
MTR 8-13/13	10	41.18 (1046)	20.47 (520)	20.71 (526)	10.24 (260)	9.84 (250)	8.66 (220)	5.28 (134)	168 (76)
MTR 8-14/14	10	42.25 (1073)	21.54 (547)	20.71 (526)	10.24 (260)	9.84 (250)	8.66 (220)	5.28 (134)	168 (76)

The maximum immersion depth is 39.6 in. (1006 mm).  
 Maximum number of stages is 31. Maximum number of impellers is 14.  
 Each additional stage adds 1.07 in. (27 mm) of immersion depth.

## Dimensions and weights MTRE 8, 60 Hz NEMA

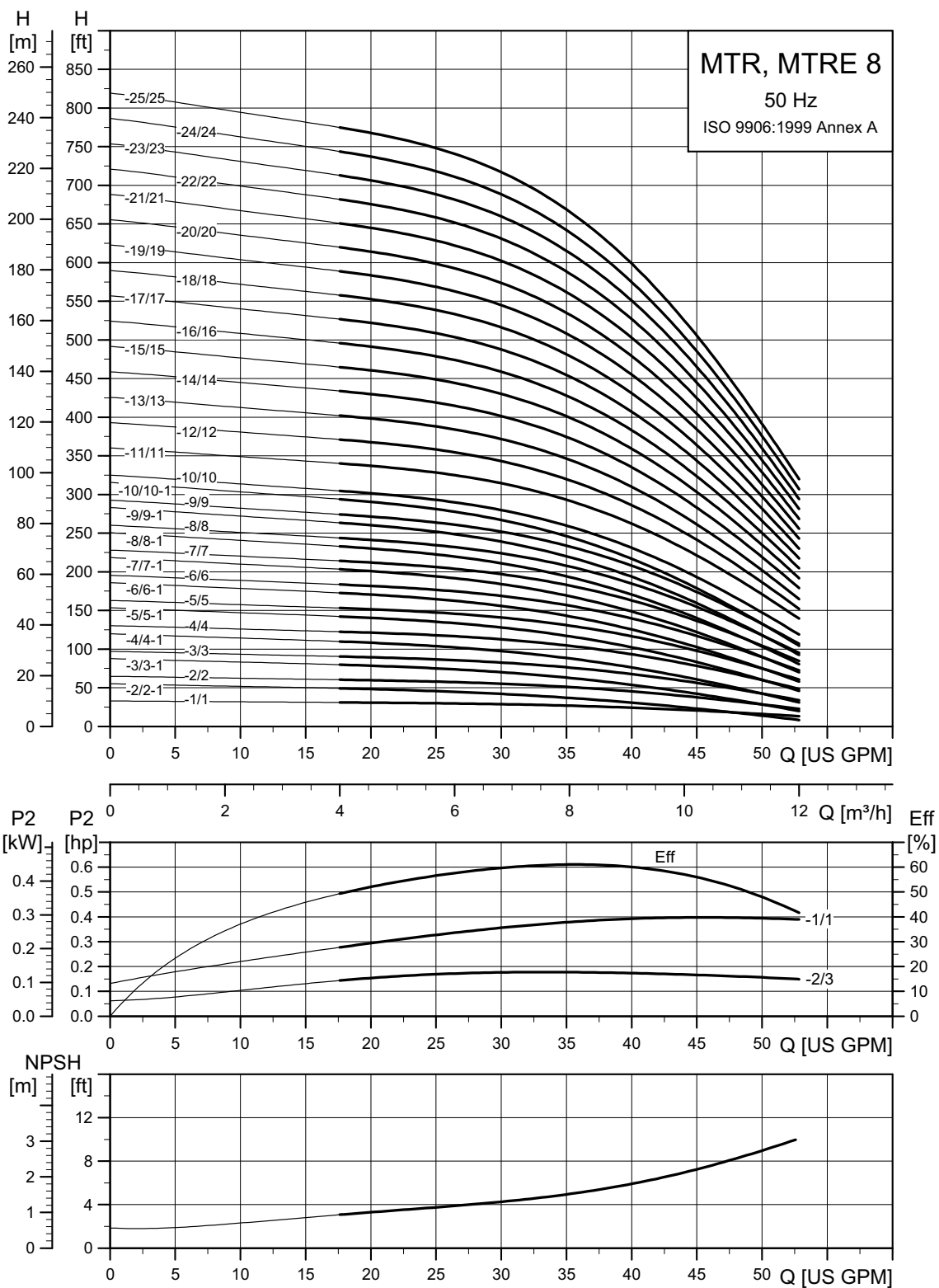
Pump type	P2 [Hp]	MTRE 8, 60 Hz NEMA frame								Net wt [lb (kg)]
		Dimensions [in. (mm)]								
		A	B	C	AC	D2	P	AD	AG	
MTRE 8-1/1	0.75	19.69 (500)	7.72 (196)	11.97 (304)	5.55 (141)	6.50 (165)	-	5.51 (140)	10.55 (268)	52 (24)
MTRE 8-2/2-1	1	20.75 (527)	8.78 (223)	11.97 (304)	5.55 (141)	6.50 (165)	-	5.51 (140)	10.55 (268)	52 (24)
MTRE 8-2/2	1.5	22.33 (567)	8.78 (223)	13.54 (344)	7.01 (178)	6.50 (165)	-	6.57 (167)	10.55 (268)	54 (25)
MTRE 8-3/3-1	2	25.36 (644)	9.84 (250)	15.51 (394)	7.01 (178)	6.50 (165)	-	6.57 (167)	10.55 (268)	58 (26)
MTRE 8-4/4	3	28.00 (711)	10.91 (277)	17.09 (434)	7.01 (178)	9.84 (250)	-	6.57 (167)	10.55 (268)	75 (34)
MTRE 8-6/6-1	5	30.67 (779)	13.03 (331)	17.64 (448)	7.80 (198)	9.84 (250)	-	6.97 (177)	10.39 (264)	138 (63)
MTRE 8-8/8-1	5	34.26 (870)	15.16 (385)	19.09 (485)	8.66 (220)	9.84 (250)	-	7.40 (188)	11.42 (290)	138 (63)
MTRE 8-10/10	7.5	38.12 (968)	17.28 (439)	20.83 (529)	8.66 (220)	9.84 (250)	-	7.40 (188)	11.42 (290)	159 (72)
MTRE 8-14/14	10	41.89 (1064)	21.54 (547)	20.35 (517)	10.24 (260)	9.84 (250)	-	8.39 (213)	11.42 (290)	189 (86)

The maximum immersion depth is 39.6 in. (1006 mm).  
 Maximum number of stages is 31. Maximum number of impellers is 14.  
 Each additional stage adds 1.07 in. (27 mm) of immersion depth.



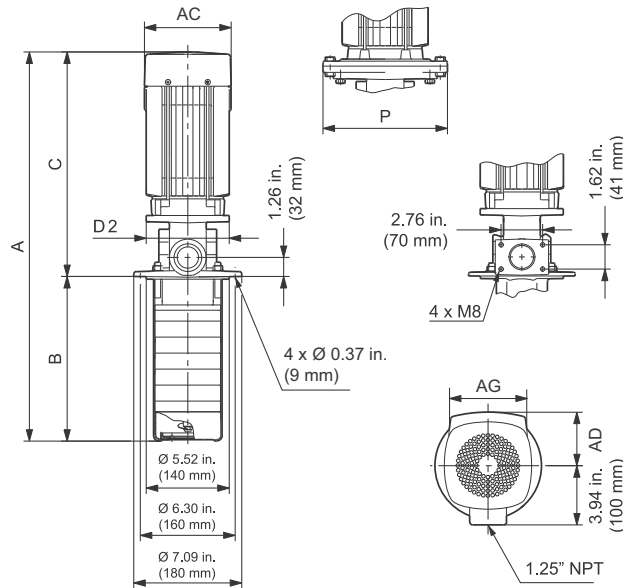
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MTR, MTRE 8, 50 Hz



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Dimensional sketches



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Dimensions and weights MTR 8, 50 Hz IEC

Pump type	P2 [kW]	MTR 8, 50 Hz IEC								Net wt [lb (kg)]
		Dimensions [in. (mm)]								
		A	B	C	AC	D2	P	AD	AG	
MTR 8-1/1	0.37	19.61 (498)	7.72 (196)	11.89 (302)	5.56 (141)	5.52 (140)	-	4.30 (109)	3.23 (82)	39 (18)
MTR 8-2/2-1	0.55	20.67 (525)	8.78 (223)	11.89 (302)	5.56 (141)	5.52 (140)	-	4.30 (109)	3.23 (82)	38 (17)
MTR 8-2/2	0.75	22.25 (565)	8.78 (223)	13.47 (342)	5.56 (141)	5.52 (140)	-	4.30 (109)	3.23 (82)	42 (19)
MTR 8-3/3-1	0.75	23.31 (592)	9.85 (250)	13.47 (342)	5.56 (141)	5.52 (140)	-	4.30 (109)	3.23 (82)	45 (20)
MTR 8-3/3	1.1	24.10 (612)	9.85 (250)	14.26 (362)	5.56 (141)	5.52 (140)	-	4.30 (109)	3.23 (82)	49 (22)
MTR 8-4/4-1	1.1	25.16 (639)	10.91 (277)	14.26 (362)	5.56 (141)	5.52 (140)	-	4.30 (109)	3.23 (82)	49 (22)
MTR 8-4/4	1.5	26.34 (669)	10.91 (277)	15.44 (392)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	65 (30)
MTR 8-5/5-1	1.5	27.42 (696)	11.97 (304)	15.44 (392)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	65 (30)
MTR 8-5/5	1.5	28.98 (736)	11.97 (304)	17.01 (432)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	71 (32)
MTR 8-6/6-1	2.2	30.04 (763)	13.04 (331)	17.01 (432)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	72 (33)
MTR 8-6/6	2.2	30.04 (763)	13.04 (331)	17.01 (432)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	72 (33)
MTR 8-7/7-1	2.2	31.11 (790)	14.10 (358)	17.01 (432)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	72 (33)
MTR 8-7/7	2.2	31.11 (790)	14.10 (358)	17.01 (432)	7.01 (178)	5.52 (140)	-	4.34 (110)	6.38 (162)	72 (33)
MTR 8-8/8-1	3	32.72 (831)	15.16 (385)	17.56 (446)	7.8 (198)	6.30 (160)	-	4.73 (120)	6.38 (162)	81 (37)
MTR 8-8/8	3	32.72 (831)	15.16 (385)	17.56 (446)	7.8 (198)	6.30 (160)	-	4.73 (120)	6.38 (162)	81 (37)
MTR 8-9/9-1	3	33.78 (858)	16.23 (412)	17.56 (446)	7.8 (198)	6.30 (160)	-	4.73 (120)	6.38 (162)	81 (37)
MTR 8-9/9	3	33.78 (858)	16.23 (412)	17.56 (446)	7.8 (198)	6.30 (160)	-	4.73 (120)	6.38 (162)	81 (37)
MTR 8-10/10-1	3	34.85 (885)	17.29 (439)	17.56 (446)	7.8 (198)	6.30 (160)	-	4.73 (120)	6.38 (162)	81 (37)
MTR 8-10/10	3	34.85 (885)	17.29 (439)	17.56 (446)	7.8 (198)	6.30 (160)	-	4.73 (120)	6.38 (162)	81 (37)
MTR 8-11/11	4	37.37 (949)	18.35 (466)	19.02 (483)	8.67 (220)	6.30 (160)	-	5.28 (134)	7.96 (202)	107 (49)
MTR 8-12/12	4	38.43 (976)	19.41 (493)	19.02 (483)	8.67 (220)	6.30 (160)	-	5.28 (134)	7.96 (202)	107 (49)
MTR 8-13/13	4	39.49 (1003)	20.48 (520)	19.02 (483)	8.67 (220)	6.30 (160)	-	5.28 (134)	7.96 (202)	107 (49)
MTR 8-14/14	5.5	42.29 (1074)	21.54 (547)	20.83 (527)	8.67 (220)	-	11.82 (300)	5.28 (134)	7.96 (202)	145 (66)
MTR 8-15/15	5.5	43.35 (1101)	22.60 (574)	20.83 (527)	8.67 (220)	-	11.82 (300)	5.28 (134)	7.96 (202)	145 (66)
MTR 8-16/16	5.5	44.41 (1128)	23.67 (601)	20.83 (527)	8.67 (220)	-	11.82 (300)	5.28 (134)	7.96 (202)	145 (66)
MTR 8-17/17	5.5	45.48 (1155)	24.73 (628)	20.83 (527)	8.67 (220)	-	11.82 (300)	5.28 (134)	7.96 (202)	145 (66)
MTR 8-18/18	5.5	46.54 (1182)	25.79 (655)	20.83 (527)	8.67 (220)	-	11.82 (300)	5.28 (134)	7.96 (202)	145 (66)
MTR 8-19/19	7.5	47.13 (1197)	26.86 (682)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)
MTR 8-20/20	7.5	48.19 (1224)	27.92 (709)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)
MTR 8-21/21	7.5	49.26 (1251)	28.98 (736)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)
MTR 8-22/22	7.5	50.32 (1278)	30.04 (763)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)
MTR 8-23/23	7.5	51.38 (1305)	31.11 (790)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)
MTR 8-24/24	7.5	52.45 (1332)	32.17 (817)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)
MTR 8-25/25	7.5	53.51 (1359)	33.23 (844)	20.28 (515)	10.24 (260)	-	11.82 (300)	6.26 (159)	8.00 (203)	167 (76)

The maximum immersion depth is 39.6 in. (1006 mm).  
 Maximum number of stages is 31. Maximum number of impellers is 25.  
 Each additional stage adds 1.07 in. (27 mm) of immersion depth.

## Dimensions and weights MTRE 8, 50 Hz IEC

Pump type	P2 [kW]	MTRE 8, 50 Hz IEC								Net wt [lb (kg)]
		Dimensions [in. (mm)]								
		A	B	C	AC	D2	P	AD	AG	
MTRE 8-1/1	0.37	20.52 (521)	7.72 (196)	12.80 (325)	4.81 (122)	5.52 (140)	-	6.23 (158)	8.35 (212)	36 (16)
MTRE 8-2/2-1	0.55	21.58 (548)	8.78 (223)	12.80 (325)	4.81 (122)	5.52 (140)	-	6.23 (158)	8.35 (212)	38 (17)
MTRE 8-3/3-1	0.75	22.64 (575)	9.85 (250)	12.80 (325)	4.81 (122)	5.52 (140)	-	6.23 (158)	8.35 (212)	41 (19)
MTRE 8-4/4-1	1.1	23.71 (602)	10.91 (277)	12.80 (325)	4.81 (122)	5.52 (140)	-	6.23 (158)	8.35 (212)	45 (20)
MTRE 8-5/5	1.5	27.13 (689)	11.97 (304)	15.16 (385)	4.81 (122)	5.52 (140)	-	6.23 (158)	10.56 (268)	75 (36)
MTRE 8-7/7	2.2	29.26 (743)	14.10 (358)	15.16 (385)	4.81 (122)	5.52 (140)	-	6.23 (158)	10.56 (268)	81 (37)
MTRE 8-10/10	3	34.85 (885)	17.29 (439)	17.56 (446)	7.80 (198)	6.30 (160)	-	6.97 (177)	10.40 (264)	91 (41)
MTRE 8-13/13	4	39.49 (1003)	20.48 (520)	19.02 (483)	8.67 (220)	6.30 (160)	-	7.41 (188)	11.42 (290)	105 (48)
MTRE 8-18/18	5.5	46.54 (1182)	25.79 (655)	20.75 (527)	8.67 (220)	-	11.74 (298)	7.41 (188)	11.42 (290)	164 (74)
MTRE 8-25/25	7.5	53.51 (1359)	33.23 (844)	20.28 (515)	10.24 (260)	-	11.82 (300)	8.39 (213)	11.42 (290)	192 (87)

The maximum immersion depth is 39.6 in. (1006 mm).

Maximum number of stages is 31. Maximum number of impellers is 25.

Each additional stage adds 1.07 in. (27 mm) of immersion depth.

## 3. Replacement guide

### How to use the replacement guide

#### Comparing curves

##### Example

Existing pump: SPK 8-9.

Select the right MTR 8 pump as follows (see fig. 4):

1. Find and mark the duty point of the SPK 8-9 pump, i.e. point A.
2. Find the MTR 8 pump(s) matching the duty point of the SPK 8-9 pump.

##### Result

- If a lower head is acceptable, choose an MTR 8-4/4 pump, i.e. duty point B.
- If a higher head is acceptable, choose an MTR 8-5/5 pump, i.e. duty point C.

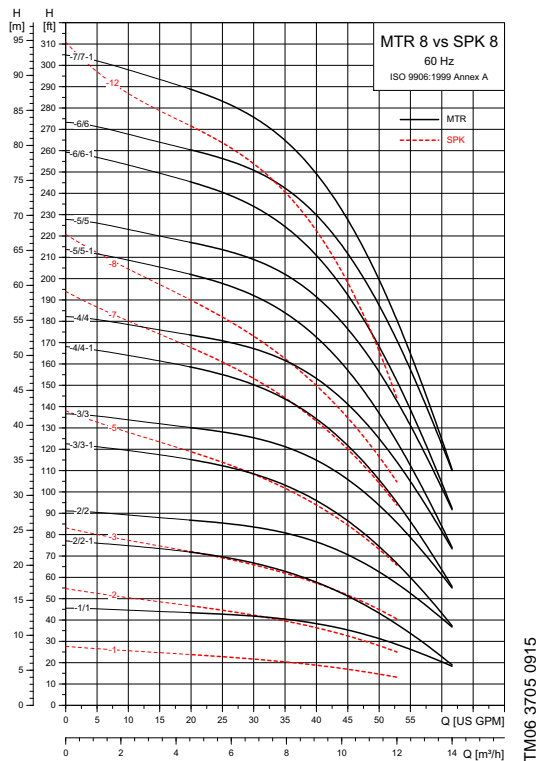


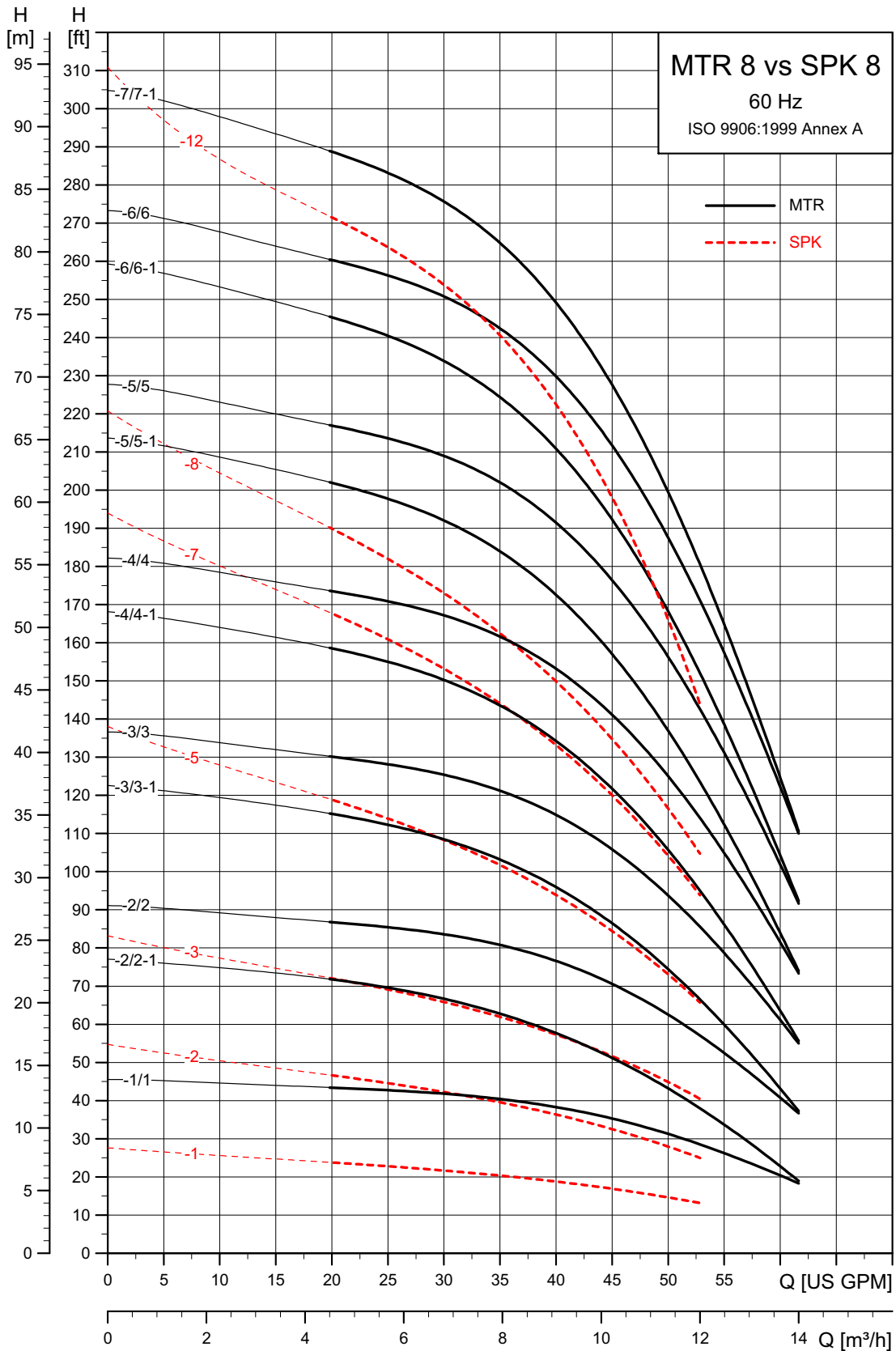
Fig. 4 MTR 8 compared to SPK 8

#### Using replacement lists

There are two types of replacement lists.

One is based on the comparison of hydraulic performance. The other is based on the comparison of both hydraulic performance and pump dimension "B".

### MTR 8 to replace SPK 8, 60 Hz



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## Replacement lists, 60 Hz NEMA

### Hydraulic performance

The replacement list below is based on the comparison of hydraulic performance.

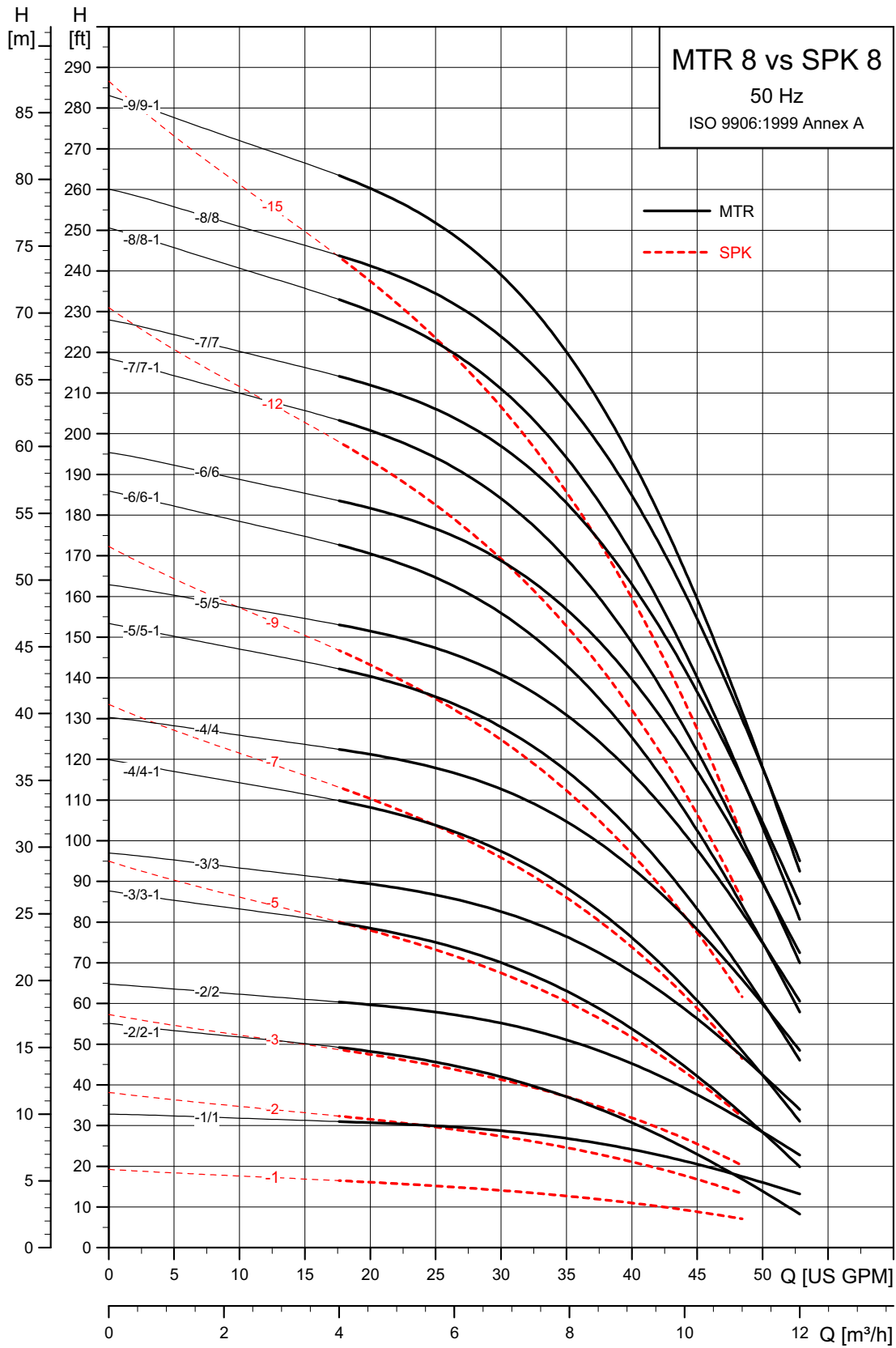
Pump to be replaced		Replacement pumps		
SPK 8 (60 Hz)		MTR 8 (60 Hz NEMA)		
Pump type	P2 [Hp]	Choice	Pump type	P2 [Hp]
SPK 8-1/1	0.5	1	MTR 8-1/1	0.75
SPK 8-2/2	0.75	1	MTR 8-1/1	0.75
SPK 8-3/3	1.5	1	MTR 8-2/2-1	1
SPK 8-5/5	2	1	MTR 8-3/3-1	2
SPK 8-7/7	3	1	MTR 8-4/4-1	3
SPK 8-8/8	3	1	MTR 8-4/4	3
		2	MTR 8-5/5-1	3

### Hydraulic performance and pump dimension "B"

The replacement list below is based on the comparison of both hydraulic performance and pump dimension "B", which is shown in the technical data. See section 2. [Performance curves and technical data](#).

Pump to be replaced			Replacement pumps			
SPK 8 (60 Hz)			MTR 8 (60 Hz NEMA)			
Pump type	P2 [Hp]	B [in. (mm)]	Choice	Pump type	P2 [Hp]	B [in. (mm)]
SPK 8-1/1	0.5	7.17 (182)	1	MTR 8-1/1	0.75	7.72 (196)
SPK 8-2/1	0.5	8.82 (224)	1	MTR 8-2/1	0.75	8.78 (223)
SPK 8-3/1	0.5	10.48 (266)	1	MTR 8-3/1	0.75	9.85 (250)
SPK 8-5/1	0.5	13.78 (350)	1	MTR 8-7/1	0.75	14.10 (358)
SPK 8-7/1	0.5	17.09 (434)	1	MTR 8-10/1	0.75	17.29 (439)
SPK 8-9/1	0.5	20.40 (518)	1	MTR 8-13/1	0.75	20.48 (520)
SPK 8-12/1	0.5	25.36 (644)	1	MTR 8-18/1	0.75	25.79 (655)
SPK 8-15/1	0.5	30.32 (770)	1	MTR 8-22/1	0.75	30.04 (763)
SPK 8-15/1 L	0.5	39.57 (1005)	1	MTR 8-31/1	0.75	39.61 (1006)
SPK 8-2/2	0.75	8.82 (224)	1	MTR 8-2/1	0.75	8.78 (223)
SPK 8-3/2	0.75	10.48 (266)	1	MTR 8-3/1	0.75	9.85 (250)
SPK 8-5/2	0.75	13.78 (350)	1	MTR 8-7/1	0.75	14.10 (358)
SPK 8-7/2	0.75	17.09 (434)	1	MTR 8-10/1	0.75	17.29 (439)
SPK 8-9/2	0.75	20.40 (518)	1	MTR 8-13/1	0.75	20.48 (520)
SPK 8-12/2	0.75	25.36 (644)	1	MTR 8-18/1	0.75	25.79 (655)
SPK 8-15/2	0.75	30.32 (770)	1	MTR 8-22/1	0.75	30.04 (763)
SPK 8-15/2 L	0.75	39.57 (1005)	1	MTR 8-31/1	0.75	39.61 (1006)
SPK 8-3/3	1.5	10.48 (266)	1	MTR 8-3/2-1	1	9.85 (250)
SPK 8-5/3	1.5	13.78 (350)	1	MTR 8-7/2-1	1	14.10 (358)
SPK 8-7/3	1.5	17.09 (434)	1	MTR 8-10/2-1	1	17.29 (439)
SPK 8-9/3	1.5	20.40 (518)	1	MTR 8-13/2-1	1	20.48 (520)
SPK 8-12/3	1.5	25.36 (644)	1	MTR 8-18/2-1	1	25.79 (655)
SPK 8-15/3	1.5	30.32 (770)	1	MTR 8-22/2-1	1	30.04 (763)
SPK 8-15/3 L	1.5	39.57 (1005)	1	MTR 8-31/2-1	1	39.61 (1006)
SPK 8-5/5	2	13.78 (350)	1	MTR 8-7/3-1	2	14.10 (358)
SPK 8-7/5	2	17.09 (434)	1	MTR 8-10/3-1	2	17.29 (439)
SPK 8-9/5	2	20.40 (518)	1	MTR 8-13/3-1	2	20.48 (520)
SPK 8-12/5	2	25.36 (644)	1	MTR 8-18/3-1	2	25.79 (655)
SPK 8-15/5	2	30.32 (770)	1	MTR 8-22/3-1	2	30.04 (763)
SPK 8-15/5 L	2	39.57 (1005)	1	MTR 8-31/3-1	2	39.61 (1006)
SPK 8-7/7	3	17.09 (434)	1	MTR 8-10/4-1	3	17.29 (439)
SPK 8-9/7	3	20.40 (518)	1	MTR 8-13/4-1	3	20.48 (520)
SPK 8-12/7	3	25.36 (644)	1	MTR 8-18/4-1	3	25.79 (655)
SPK 8-15/7	3	30.32 (770)	1	MTR 8-22/4-1	3	30.04 (763)
SPK 8-15/7 L	3	39.57 (1005)	1	MTR 8-31/4-1	3	39.61 (1006)
SPK 8-9/8	3	20.40 (518)	1	MTR 8-13/4	3	20.48 (520)
			2	MTR 8-13/5-1	3	20.48 (520)
SPK 8-12/8	3	25.36 (644)	1	MTR 8-18/4	3	25.79 (655)
			2	MTR 8-18/5-1	3	25.79 (655)
SPK 8-15/8	3	30.32 (770)	1	MTR 8-22/4	3	30.04 (763)
			2	MTR 8-22/5-1	3	30.04 (763)
SPK 8-15/8 L	3	39.57 (1005)	1	MTR 8-31/4	3	39.61 (1006)
			2	MTR 8-31/5-1	3	39.61 (1006)

MTR 8 to replace SPK 8, 50 Hz



TM06 3726 0915



## Replacement lists, 50 Hz IEC

### Hydraulic performance

The replacement list below is based on the comparison of hydraulic performance.

Pump to be replaced		Replacement pumps		
SPK 8 (50 Hz)		MTR 8 (50 Hz IEC)		
Pump type	P2 [kW]	Choice	Pump type	P2 [kW]
SPK 8-1/1	0.25	1	MTR 8-1/1	0.37
SPK 8-2/2	0.37	1	MTR 8-1/1	0.37
SPK 8-3/3	0.55	1	MTR 8-2/2-1	0.55
SPK 8-5/5	0.75	1	MTR 8-3/3-1	0.75
SPK 8-7/7	1.1	1	MTR 8-4/4-1	1.1
SPK 8-9/9	1.5	1	MTR 8-5/5-1	1.5
SPK 8-12/12	2.2	1	MTR 8-6/6	2.2
		2	MTR 8-7/7-1	2.2
SPK 8-15/15	2.2	1	MTR 8-7/7	2.2
		2	MTR 8-8/8-1	3

### Hydraulic performance and pump dimension "B"

The replacement list below is based on the comparison of both hydraulic performance and pump dimension "B", which is shown in the technical data. See section 2. [Performance curves and technical data](#).

Pump to be replaced			Replacement pumps			
SPK 8 (50 Hz)			MTR 8 (50 Hz IEC)			
Pump type	P2 [kW]	B [in. (mm)]	Choice	Pump type	P2 [kW]	B [in. (mm)]
SPK 8-1/1	0.25	7.17 (182)	1	MTR 8-1/1	0.37	7.72 (196)
SPK 8-2/1	0.25	8.82 (224)	1	MTR 8-2/1	0.37	8.78 (223)
SPK 8-3/1	0.25	10.48 (266)	1	MTR 8-3/1	0.37	9.85 (250)
SPK 8-5/1	0.25	13.78 (350)	1	MTR 8-7/1	0.37	14.10 (358)
SPK 8-7/1	0.25	17.09 (434)	1	MTR 8-10/1	0.37	17.29 (439)
SPK 8-9/1	0.25	20.40 (518)	1	MTR 8-13/1	0.37	20.48 (520)
SPK 8-12/1	0.25	25.36 (644)	1	MTR 8-18/1	0.37	25.79 (655)
SPK 8-15/1	0.25	30.32 (770)	1	MTR 8-22/1	0.37	30.04 (763)
SPK 8-15/1 L	0.25	39.57 (1005)	1	MTR 8-31/1	0.37	39.61 (1006)
SPK 8-2/2	0.37	8.82 (224)	1	MTR 8-2/1	0.37	8.78 (223)
SPK 8-3/2	0.37	10.48 (266)	1	MTR 8-3/1	0.37	9.85 (250)
SPK 8-5/2	0.37	13.78 (350)	1	MTR 8-7/1	0.37	14.10 (358)
SPK 8-7/2	0.37	17.09 (434)	1	MTR 8-10/1	0.37	17.29 (439)
SPK 8-9/2	0.37	20.40 (518)	1	MTR 8-13/1	0.37	20.48 (520)
SPK 8-12/2	0.37	25.36 (644)	1	MTR 8-18/1	0.37	25.79 (655)
SPK 8-15/2	0.37	30.32 (770)	1	MTR 8-22/1	0.37	30.04 (763)
SPK 8-15/2 L	0.37	39.57 (1005)	1	MTR 8-31/1	0.37	39.61 (1006)
SPK 8-3/3	0.55	10.48 (266)	1	MTR 8-3/2-1	0.55	9.85 (250)
SPK 8-5/3	0.55	13.78 (350)	1	MTR 8-7/2-1	0.55	14.10 (358)
SPK 8-7/3	0.55	17.09 (434)	1	MTR 8-10/2-1	0.55	17.29 (439)
SPK 8-9/3	0.55	20.40 (518)	1	MTR 8-13/2-1	0.55	20.48 (520)
SPK 8-12/3	0.55	25.36 (644)	1	MTR 8-18/2-1	0.55	25.79 (655)
SPK 8-15/3	0.55	30.32 (770)	1	MTR 8-22/2-1	0.55	30.04 (763)
SPK 8-15/3 L	0.55	39.57 (1005)	1	MTR 8-31/2-1	0.55	39.61 (1006)
SPK 8-5/5	0.75	13.78 (350)	1	MTR 8-7/3-1	0.75	14.10 (358)
SPK 8-7/5	0.75	17.09 (434)	1	MTR 8-10/3-1	0.75	17.29 (439)
SPK 8-9/5	0.75	20.40 (518)	1	MTR 8-13/3-1	0.75	20.48 (520)
SPK 8-12/5	0.75	25.36 (644)	1	MTR 8-18/3-1	0.75	25.79 (655)
SPK 8-15/5	0.75	30.32 (770)	1	MTR 8-22/3-1	0.75	30.04 (763)
SPK 8-15/5 L	0.75	39.57 (1005)	1	MTR 8-31/3-1	0.75	39.61 (1006)
SPK 8-7/7	1.1	17.09 (434)	1	MTR 8-10/4-1	1.1	17.29 (439)
SPK 8-9/7	1.1	20.40 (518)	1	MTR 8-13/4-1	1.1	20.48 (520)
SPK 8-12/7	1.1	25.36 (644)	1	MTR 8-18/4-1	1.1	25.79 (655)
SPK 8-15/7	1.1	30.32 (770)	1	MTR 8-22/4-1	1.1	30.04 (763)
SPK 8-15/7 L	1.1	39.57 (1005)	1	MTR 8-31/4-1	1.1	39.61 (1006)

Pump to be replaced			Replacement pumps			
SPK 8 (50 Hz)			MTR 8 (50 Hz IEC)			
Pump type	P2 [kW]	B [in. (mm)]	Choice	Pump type	P2 [kW]	B [in. (mm)]
SPK 8-9/9	1.5	20.40 (518)	1	MTR 8-13/5-1	1.5	20.48 (520)
SPK 8-12/9	1.5	25.36 (644)	1	MTR 8-18/5-1	1.5	25.79 (655)
SPK 8-15/9	1.5	30.32 (770)	1	MTR 8-22/5-1	1.5	30.04 (763)
SPK 8-15/9 L	1.5	39.57 (1005)	1	MTR 8-31/5-1	1.5	39.61 (1006)
SPK 8-12/12	2.2	25.36 (644)	1	MTR 8-18/6	2.2	25.79 (655)
SPK 8-15/12	2.2	30.32 (770)	2	MTR 8-18/7-1	2.2	25.79 (655)
SPK 8-15/12 L	2.2	39.57 (1005)	1	MTR 8-22/6	2.2	30.04 (763)
SPK 8-15/15	2.2	30.32 (770)	2	MTR 8-22/7-1	2.2	30.04 (763)
SPK 8-15/15	2.2	39.57 (1005)	1	MTR 8-31/6	2.2	39.61 (1006)
			2	MTR 8-31/7-1	2.2	39.61 (1006)
			1	MTR 8-22/7	2.2	30.04 (763)
			2	MTR 8-22/8-1	3	30.04 (763)
			1	MTR 8-31/7	2.2	39.61 (1006)
			2	MTR 8-31/8-1	3	39.61 (1006)

## 4. Further product documentation

Grundfos Product Center is an online search and sizing tool to help you make the right choice.

<http://product-selection.grundfos.com>



**SIZING** enables you to size a pump based on entered data and selection choices.

**REPLACEMENT** enables you to find a replacement product. Search results will include information on

- the lowest purchase price
- the lowest energy consumption
- the lowest total life cycle cost.

The screenshot shows the Grundfos Product Center website. At the top, there is a navigation bar with the logo and 'PRODUCT CENTER'. Below that is a search bar with a 'SEARCH' button. The main content area features four large buttons: 'SIZING' (with a subtext 'Enter pump sizing'), 'CATALOG' (with a subtext 'Product and services'), 'REPLACEMENT' (with a subtext 'Replace an old pump with a new'), and 'LIQUIDS' (with a subtext 'Find liquid pump'). Below these buttons is a 'QUICK SIZING' section with input fields for 'Flow (Q)\*' and 'Head (H)\*', and a 'Select what to size by:' section with radio buttons for 'Size by application', 'Size by pump design', and 'Size by pump family'. A 'START SIZING' button is located to the right of the 'QUICK SIZING' section. At the bottom of the 'QUICK SIZING' section, there are links for 'ADVANCED SIZING' with options for 'Advanced sizing by application' and 'Guided selection'.

**CATALOG** gives you access to the Grundfos product catalog.

**LIQUIDS** enables you to find pumps designed for aggressive, flammable or other special liquids.

### All the information you need in one place

Performance curves, technical specifications, pictures, dimensional drawings, motor curves, wiring diagrams, spare parts, service kits, 3D drawings, documents, system parts. The Product Center displays any recent and saved items - including complete projects - right on the main page.

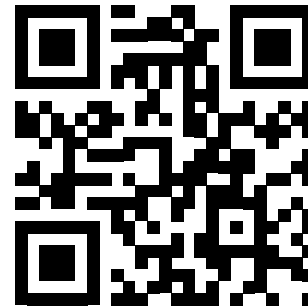
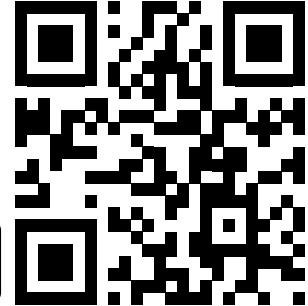
### Downloads

On the product pages, you can download installation and Operating Instructions, data booklets, service instructions, etc. in PDF format.

## Grundfos GO

### Mobile solution for professionals on the GO!

Grundfos GO is the mobile tool box for professional users on the go. It is the most comprehensive platform for mobile pump control and pump selection including sizing, replacement and documentation. It offers intuitive, handheld assistance and access to Grundfos online tools, and it saves valuable time for reporting and data collection.



Subject to alterations.







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