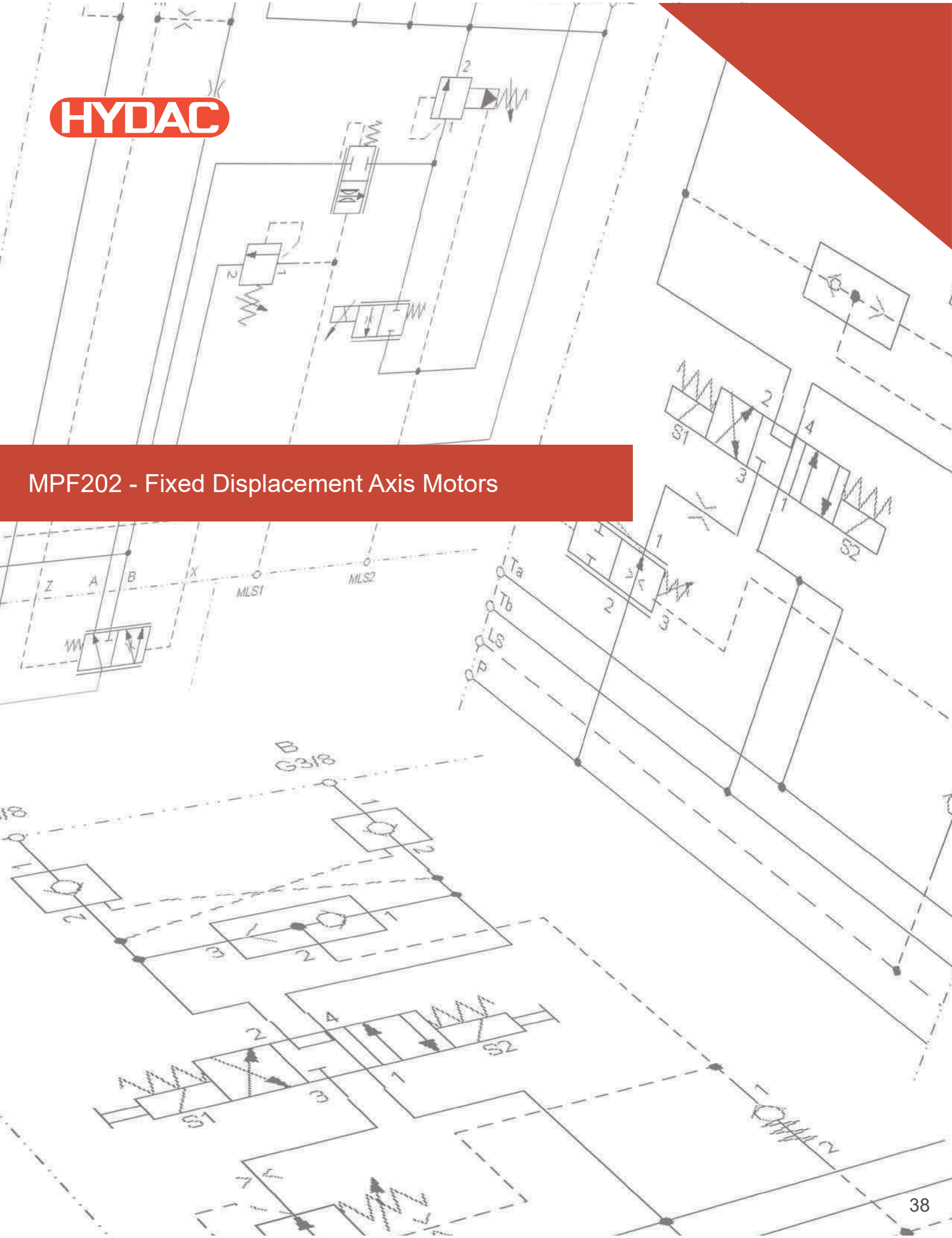

HYDAC
MPF202 - Fixed Displacement Axis Motors
MLS1
MLS2
Ta
Tb
LS
P
S1
S2

MPF202 series

The MPF202 are bent-axis motors with spherical pistons, ideal for mobile hydraulics.

Motor MPF 202 (012-130 ISO)		017	025	034	040	047	056	064	084	090	108	130
Displacement	cm^3/rev	9.6	12.6	17.0	25.4	34.2	41.2	47.1	56.7	63.5	83.6	90.7	108.0	130.0
Working pressure														
max intermittent	bar	400	400	400	400	400	400	400	400	400	400	400	400	350
max continuous		350	350	350	350	350	350	350	350	350	350	350	350	300
Revolutions														
max intermittent	rpm	8800	8800	8800	7000	7000	6300	6300	6300	6300	5200	5200	5200	5200
max continuous		8000	8000	8000	6300	6300	5700	5700	5700	5700	4700	4700	4700	4700
min continuous		300	300	300	300	300	300	300	300	300	300	300	300	300
Power														
max intermittent	kW	41	54	74	86	115	125	145	175	195	215	230	275	285
max continuous		15	20	25	40	55	60	65	80	90	100	110	130	135
Starting torque theoretical value	Nm/bar	0.15	0.20	0.27	0.40	0.54	0.66	0.75	0.89	1.0	1.33	1.44	1.71	2.06
Moment of inertia (x 10^{-3})	kg m^2	0.9	0.9	0.9	1.1	1.1	2.6	2.6	2.6	2.6	7.4	7.4	7.4	7.4
Weight	kg	8.5	8.5	8.5	9.5	9.5	16.5	16.5	16.5	16.5	28.0	28.0	30.5	30.5

Model code:

Example

MPF202	-	010	W	-	N	-	I41	-	W25	-	K3	G	-	1	00
1		2	3		4		5		6		7	8		9	10

Line

MPF202	Compact, bent-axis design ISO motors

2. Displacement

012	017	025	035	040	047	056	065	084	090	105	130

3. Direction of rotation

W	Independent

4. Sealing

N	Nitrile
H	High pressure, nitrile
V	Viton

5. Mounting flange

ISO 3019-2		012	017	025	035	040	047	056	065	084	090	105	130
I41	ISO 4-h ø80	X	X	-	-	-	-	-	-	-	-	-	-
I42	ISO 4-h ø100	O	O	X	X	-	-	-	-	-	-	-	-
I43	ISO 4-h ø125	-	-	-	-	X	X	X	X	-	-	-	-
I44	ISO 4-h ø140	-	-	-	-	-	-	-	-	X	X	O	O
I45	ISO 4-h ø160	-	-	-	-	-	-	-	-	O	O	X	X

6. Shaft

		012	017	025	035	040	047	056	065	084	090	105	130
Spline DIN 5480													
W20	W20x1.25x14x9g	X	X	-	-	-	-	-	-	-	-	-	-
W25	W25x1.25x18x9g	X	X	X	O	-	-	-	-	-	-	-	-
W30	W30x2x14x9g	-	-	X	X	X	X	X	O	-	-	-	-
W32	W32x2x14x9g	-	-	-	-	X	X	X	O	-	-	-	-
W35	W35x2x16x9g	-	-	-	-	X	X	X	X	X	X	-	-
W40	W40x2x18x9g	-	-	-	-	-	-	-	-	X	X	X	X
W45	W45x2x21x9g	-	-	-	-	-	-	-	-	O	O	X	X
Key DIN 6885													
K20	ø 20 k6	X	X	-	-	-	-	-	-	-	-	-	-
K25	ø 25 k6	X	X	X	O	-	-	-	-	-	-	-	-
K30	ø 30 k6	O	O	X	X	X	X	X	O	-	-	-	-
K35	ø 35 k6	-	-	-	-	X	X	X	X	-	-	-	-
K40	ø 40 k6	-	-	-	-	-	-	-	-	X	X	O	O
K45	ø 45 k6	-	-	-	-	-	-	-	-	O	O	X	X

X = Standard, preferred
O = Contact our Tech Dpt.

7. Connection cover

		012	017	025	035	040	047	056	065	084	090	105	130
S1	40° Mount flange vertical *	-	-	-	-	-	-	-	-	X	X	X	X
S2	40° Mount flange horizontal *	-	-	-	-	X	X	X	X	-	-	-	-
S3	40° threaded connection	X	X	X	X	-	-	-	-	-	-	-	-
V1	90° Mount flange vertical *	-	-	-	-	-	-	-	-	X	X	X	X
V2	90° Mount flange horizontal *	-	-	X	X	X	X	X	X	X	X	X	X
R1	Side connections, flanged *	-	-	X	X	X	X	X	X	X	X	X	X
K3	Combicover 90° side conn. thread .	X	X	X	X	-	-	-	-	-	-	-	-

* According to SAE J518 code 62

8. Connections

		012	017	025	035	040	047	056	065	084	090	105	130
G	ISO G*	X	X	X	X	-	-	-	-	-	-	-	-
M	Metric **	-	-	X	X	X	X	X	X	X	X	X	X
U	UN***	X	X	X	X	X	X	X	X	X	X	X	X

* Only threaded connections
** Only flanged connections
*** Only available for S covers

9. Additional

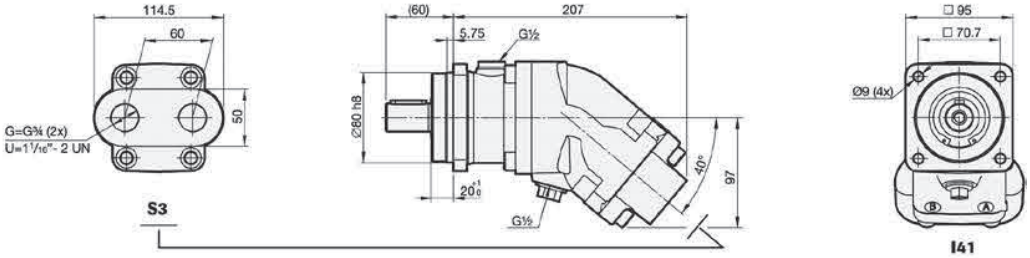
1	External drainage

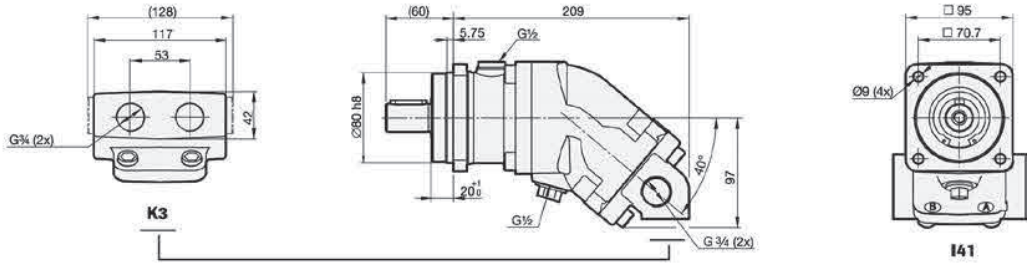
10. Speed sensor

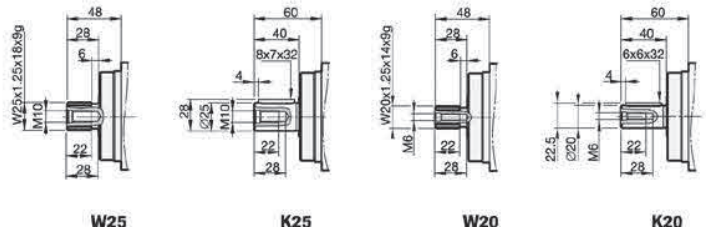
		012	017	025	035	040	047	056	065	084	090	105	130
00	No speed sensor	X	X	X	X	X	X	X	X	X	X	X	X

* See separate brochure "Speed sensor hall" for more information.

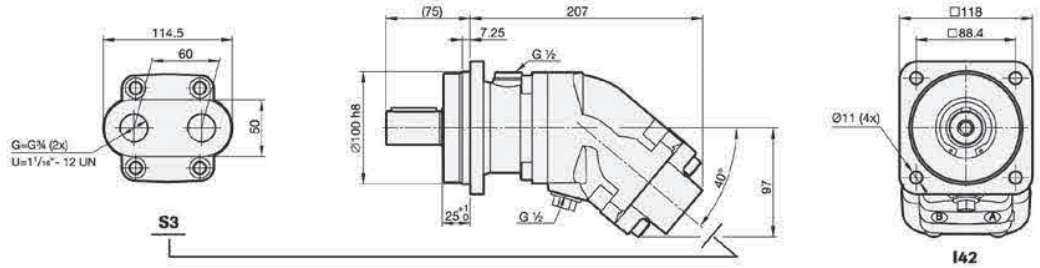
MPF 010-017

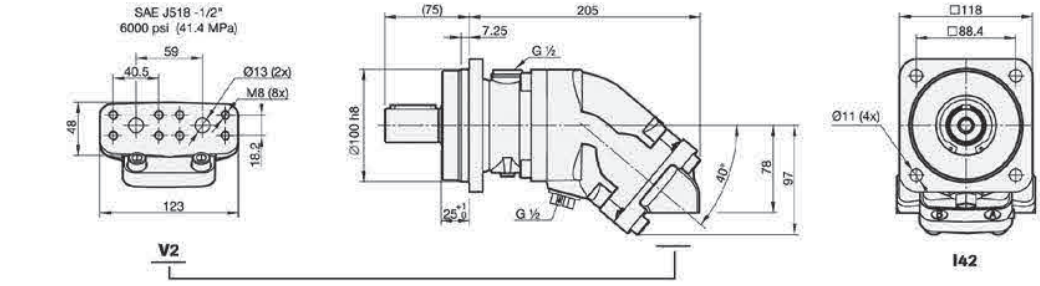

114.5
60
50
G=G¾ (2x)
U=1 1/16"- 2 UN
S3
(60)
207
5.75
G½
Ø80 h8
20
40°
97
G½
□ 95
□ 70.7
Ø9 (4x)
I41

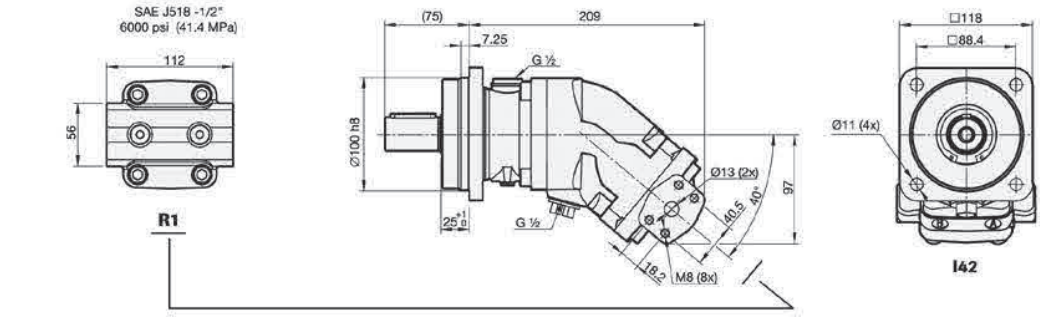

(128)
117
53
42
G¾ (2x)
K3
(60)
209
5.75
G½
Ø80 h8
20
40°
97
G½
G ¾ (2x)
□ 95
□ 70.7
Ø9 (4x)
I41

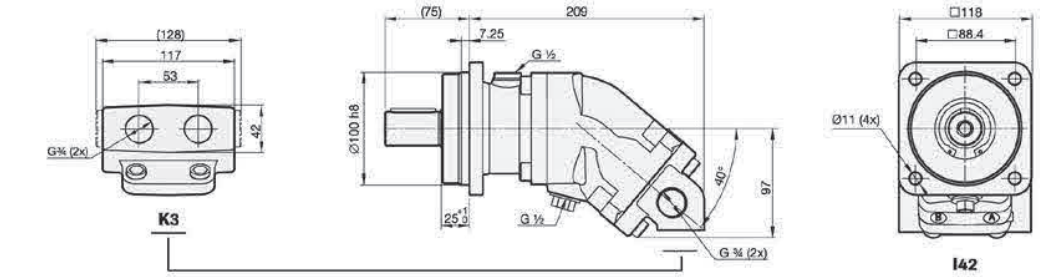

48
28
6
W25x1.25x18x9g
M10
22
28
W25
60
40
8x7x32
4
28
Ø25
M10
22
28
K25
48
28
6
W20x1.25x14x9g
M6
22
28
W20
60
40
6x6x32
4
22.5
Ø20
M6
22
28
K20

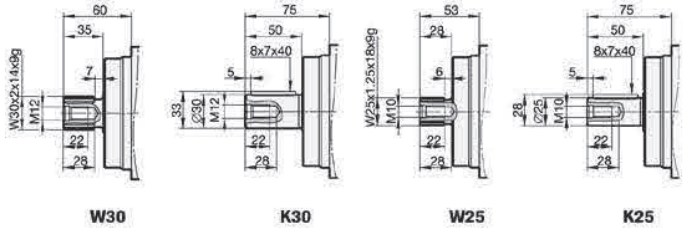
MPF 025-036

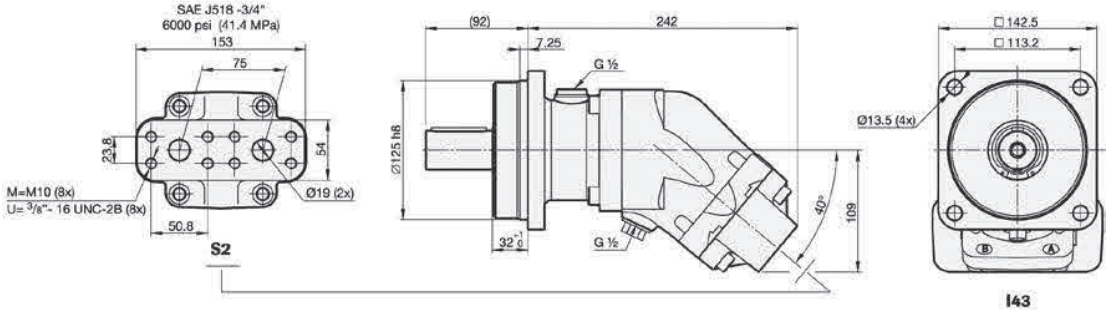

114.5
60
50
G=G¾ (2x)
U=1¹/₁₆"- 12 UN
S3
(75)
7.25
207
G ½
Ø100 h8
40°
97
25 +1 0
G ½
□118
□88.4
Ø11 (4x)
I42

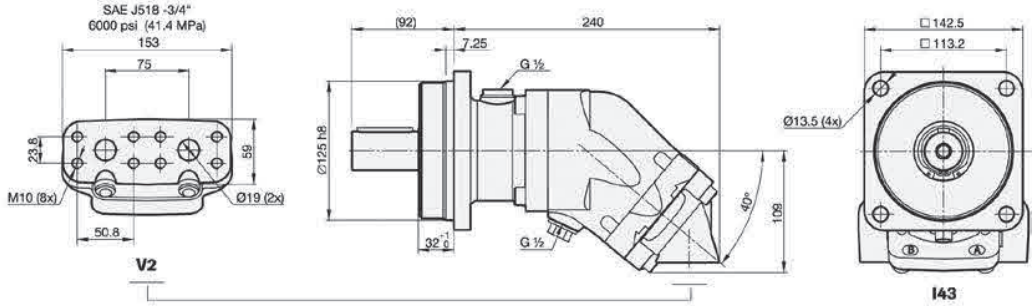

SAE J518 -1/2"
6000 psi (41.4 MPa)
59
40.5
Ø13 (2x)
M8 (8x)
48
18.2
123
V2
(75)
7.25
205
G ½
Ø100 h8
40°
78
97
25 +1 0
G ½
□118
□88.4
Ø11 (4x)
I42

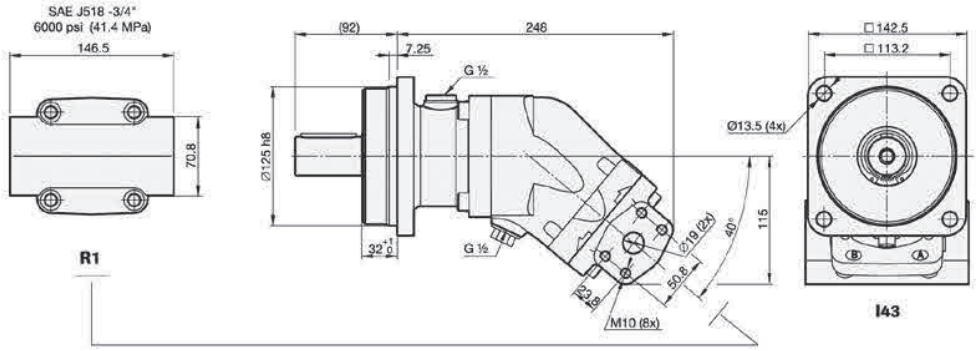

SAE J518 -1/2"
6000 psi (41.4 MPa)
112
56
R1
(75)
7.25
209
G ½
Ø100 h8
Ø13 (2x)
40.5
40°
97
25 +1 0
G ½
18.2
M8 (8x)
□118
□88.4
Ø11 (4x)
I42

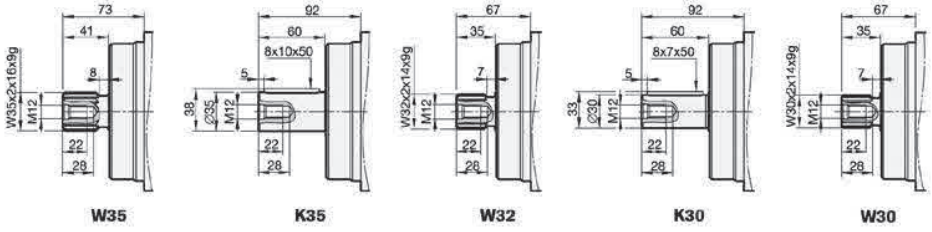

(128)
117
53
42
G¾ (2x)
K3
(75)
7.25
209
G ½
Ø100 h8
40°
97
25 +1 0
G ½
G ¾ (2x)
□118
□88.4
Ø11 (4x)
I42

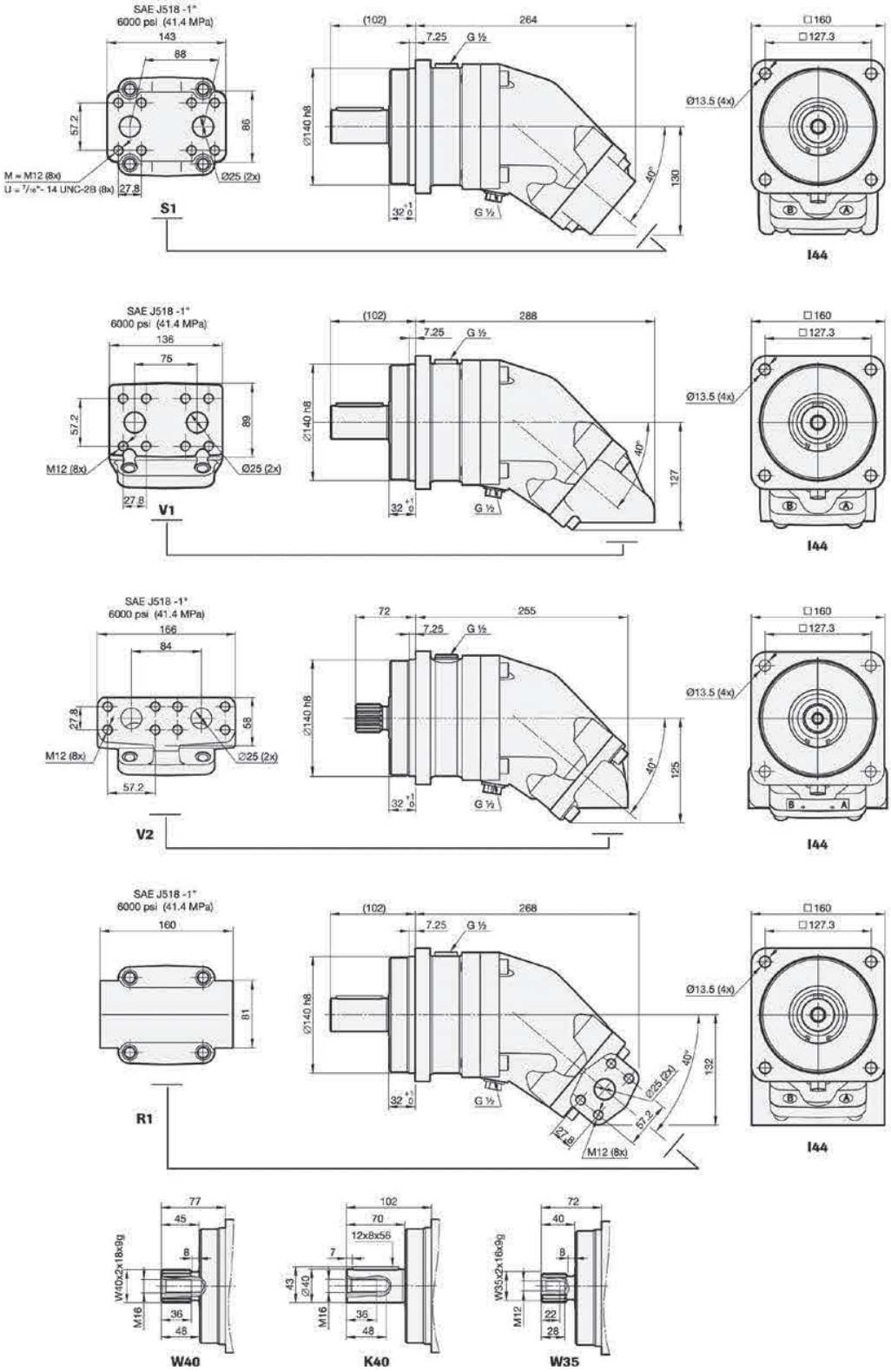

60
35
7
W30x2x14x9g
M12
22
28
W30
75
50
8x7x40
5
33
Ø30
M12
22
28
K30
53
28
6
W25x1.25x18x9g
M10
22
28
W25
75
50
8x7x40
5
28
Ø25
M10
22
28
K25


SAE J518 -3/4"
6000 psi (41.4 MPa)
153
75
23.8
54
M=M10 (8x)
U= 3/8"- 16 UNC-2B (8x)
Ø19 (2x)
50.8
S2
(92)
242
7.25
G ½
Ø125 h8
32
40°
109
□142.5
□113.2
Ø13.5 (4x)
I43

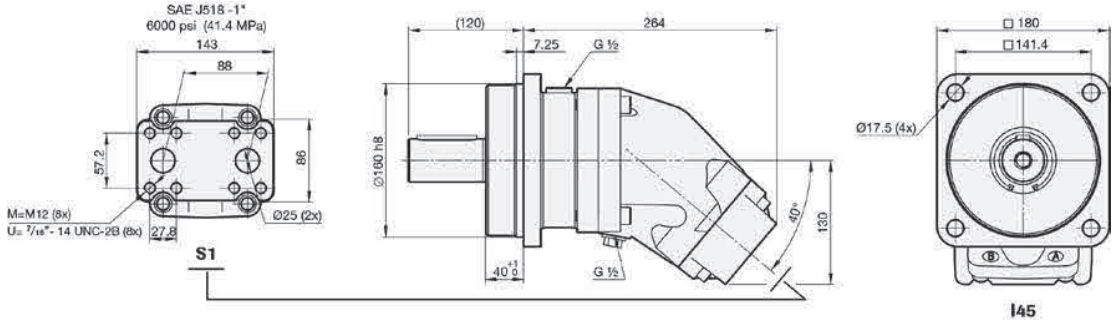

SAE J518 -3/4"
6000 psi (41.4 MPa)
153
75
23.8
59
M10 (8x)
Ø19 (2x)
50.8
V2
(92)
240
7.25
G ½
Ø125 h8
32
40°
109
□142.5
□113.2
Ø13.5 (4x)
I43

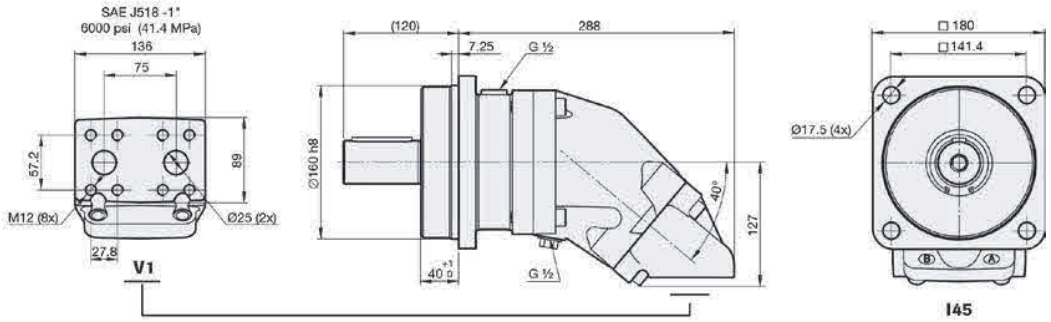

SAE J518 -3/4"
6000 psi (41.4 MPa)
146.5
70.8
R1
(92)
246
7.25
G ½
Ø125 h8
32
Ø19 (2x)
40°
115
50.8
23.8
M10 (8x)
□142.5
□113.2
Ø13.5 (4x)
I43

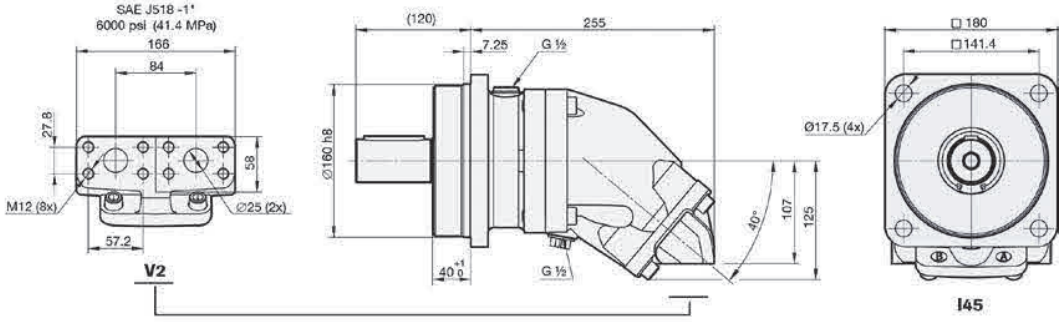

73
41
8
W35x2x16x9g
M12
22
28
W35
92
60
8x10x50
5
38
Ø35
M12
22
28
K35
67
35
7
W32x2x14x9g
M12
22
28
W32
92
60
8x7x50
5
33
Ø30
M12
22
28
K30
67
35
7
W30x2x14x9g
M12
22
28
W30

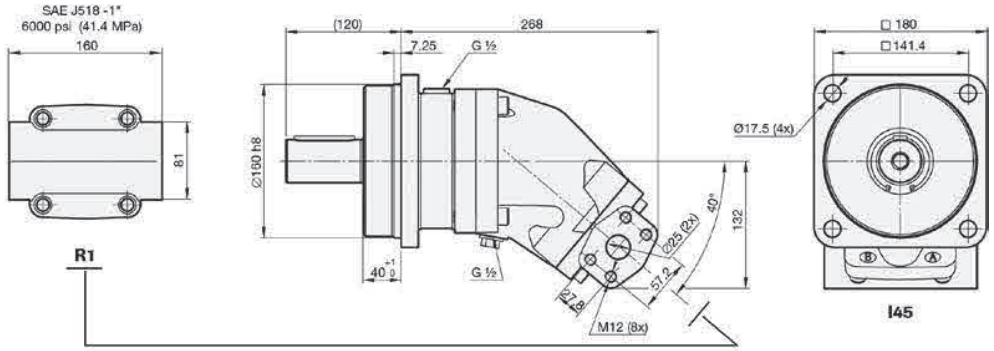

SAE J518 -1"
6000 psi (41.4 MPa)
143
88
57.2
86
M = M12 (8x)
U = 7/16"- 14 UNC-2B (8x)
27.8
Ø25 (2x)
S1
(102)
7.25
G ½
264
Ø140 h8
40°
130
32 +1 0
G ½
□160
□127.3
Ø13.5 (4x)
I44
SAE J518 -1"
6000 psi (41.4 MPa)
136
75
57.2
89
M12 (8x)
Ø25 (2x)
27.8
V1
(102)
7.25
G ½
288
Ø140 h8
40°
127
32 +1 0
G ½
□160
□127.3
Ø13.5 (4x)
I44
SAE J518 -1"
6000 psi (41.4 MPa)
166
84
27.8
58
M12 (8x)
Ø25 (2x)
57.2
V2
72
7.25
G ½
255
Ø140 h8
40°
125
32 +1 0
G ½
□160
□127.3
Ø13.5 (4x)
I44
SAE J518 -1"
6000 psi (41.4 MPa)
160
81
R1
(102)
7.25
G ½
268
Ø140 h8
40°
132
Ø25 (2x)
57.2
27.8
M12 (8x)
32 +1 0
G ½
□160
□127.3
Ø13.5 (4x)
I44
77
45
8
W40x2x18x9g
M16
36
48
W40
102
70
12x8x56
7
43
Ø40
M16
36
48
K40
72
40
8
W35x2x16x9g
M12
22
28
W35

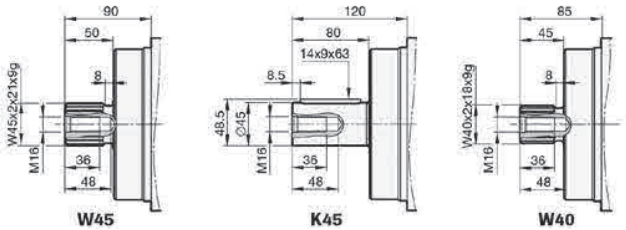
MPF 108


SAE J518 -1"
6000 psi (41.4 MPa)
143
88
57.2
86
M=M12 (8x)
U= 7/16"- 14 UNC-2B (8x)
27.8
Ø25 (2x)
S1
(120)
264
7.25
G ½
Ø160 h8
40°
130
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45

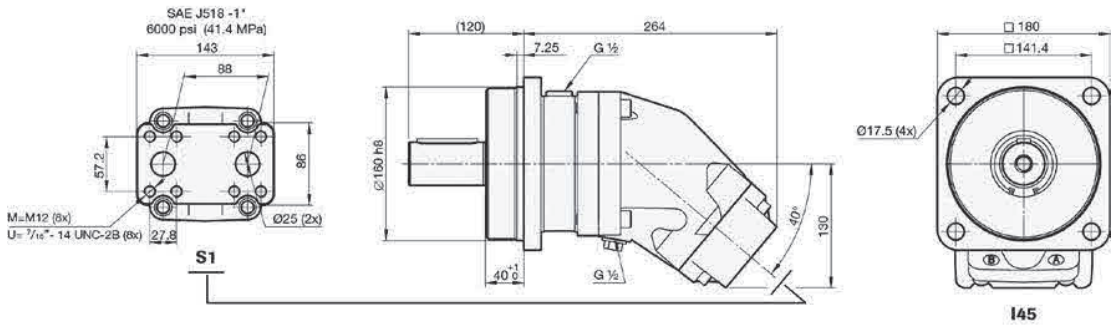

SAE J518 -1"
6000 psi (41.4 MPa)
136
75
57.2
89
M12 (8x)
Ø25 (2x)
27.8
V1
(120)
288
7.25
G ½
Ø160 h8
40°
127
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45

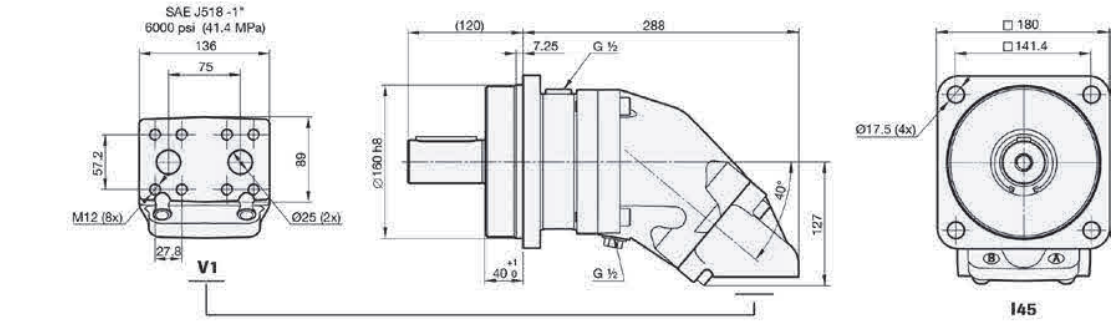

SAE J518 -1"
6000 psi (41.4 MPa)
166
84
27.8
58
M12 (8x)
Ø25 (2x)
57.2
V2
(120)
255
7.25
G ½
Ø160 h8
40°
107
125
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45

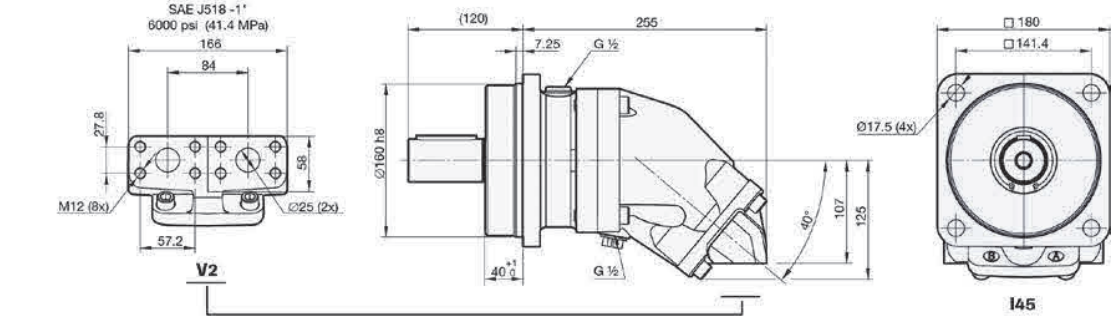

SAE J518 -1"
6000 psi (41.4 MPa)
160
81
R1
(120)
268
7.25
G ½
Ø190 h8
40°
132
Ø25 (2x)
57.2
27.8
M12 (8x)
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45

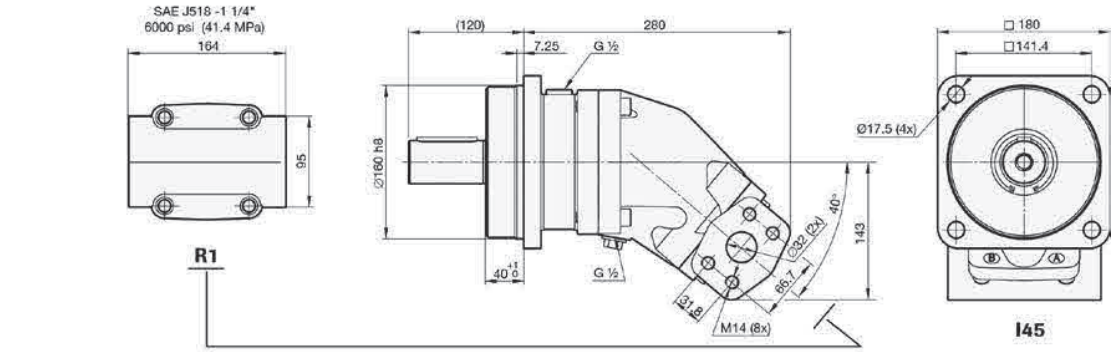

90
50
8
W45x2x21x9g
M16
36
48
W45
120
80
14x9x63
8.5
48.5
Ø45
M16
36
48
K45
85
45
8
W40x2x18x9g
M16
36
48
W40

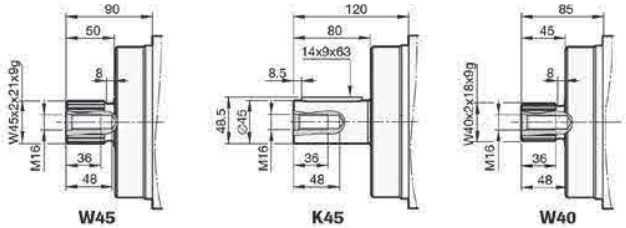
MPF 130


SAE J518 -1"
6000 psi (41.4 MPa)
143
88
57.2
86
M=M12 (8x)
U= 7/16"- 14 UNC-2B (8x)
27.8
Ø25 (2x)
S1
(120)
264
7.25
G ½
Ø160 h8
40°
130
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45


SAE J518 -1"
6000 psi (41.4 MPa)
136
75
57.2
89
M12 (8x)
Ø25 (2x)
27.8
V1
(120)
288
7.25
G ½
Ø160 h8
40°
127
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45


SAE J518 -1"
6000 psi (41.4 MPa)
166
84
27.8
58
M12 (8x)
Ø25 (2x)
57.2
V2
(120)
255
7.25
G ½
Ø160 h8
40°
107
125
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45


SAE J518 -1 1/4"
6000 psi (41.4 MPa)
164
95
R1
(120)
280
7.25
G ½
Ø160 h8
40°
143
Ø32 (2x)
66.7
31.8
M14 (8x)
40 +1 0
G ½
□ 180
□141.4
Ø17.5 (4x)
I45


90
50
8
W45x2x21x9g
M16
36
48
W45
120
80
14x9x63
8.5
48.5
Ø45
M16
36
48
K45
85
45
8
W40x2x18x9g
M16
36
48
W40