



TRACTION TESTS JAWS  
SPECIMEN WITH THREADED HEADS  
MCR-20-400 series of 20-400 kN

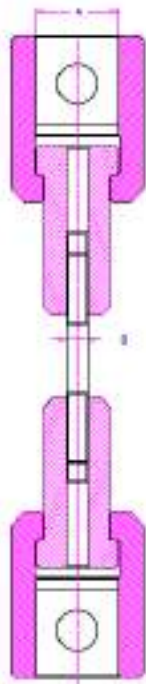
Quick-fit grips for tensile / elongation testing of metal machined specimens with threaded heads, screws, threaded studs, socket head cap screws with spherical seat

### GENERAL INFORMATION

The quick-fit grips are suitable for tensile testing of a wide range of round metal material samples with threaded heads that ensure a breakage of the specimen in the central calibrated area.

Scope of supply: 1 pair of grips

#### Full Threaded Bolt Test



MCR-A-EB



#### Examples of threaded inserts



MCR-60



MCR/60-EM12



MCR/60-EK12

**MCR/60**  
**MCR/60- EM12**  
**MCR/60-EK12**

Adapter  
 M12 hardened thread insert  
 Insert for the head of a DIN 912 - M12 screw

### A: Adapters

MCR-xx      xx = Adapter diameter 15.9, 20, 30, 31.8, 32, 36, 38, 40, 50, 60, 80, 100

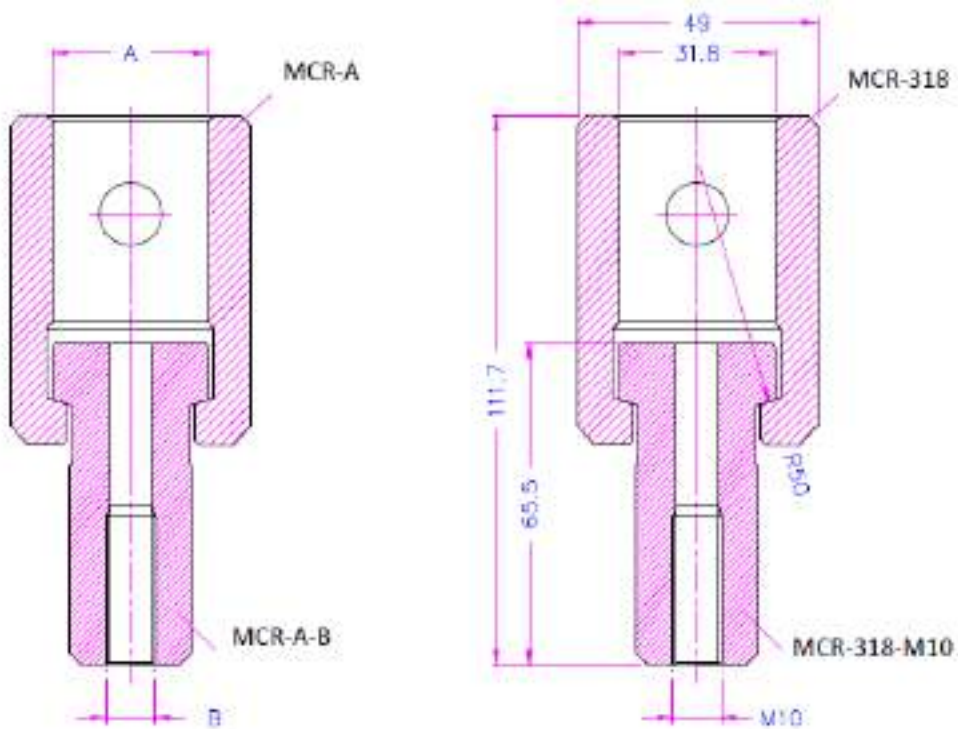
### B: Inserts

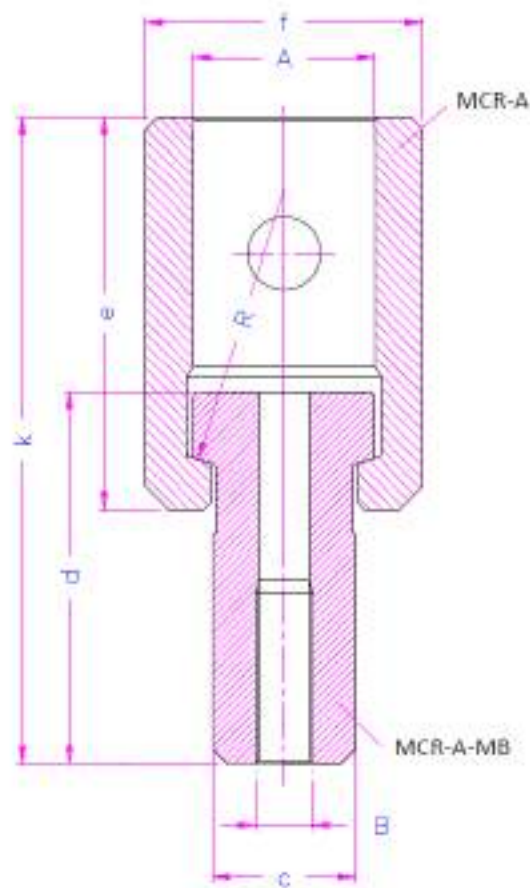
M C R - E Mxx xx= Thread insert size:    Metric threads M3...M40, UNF, UNC

MCR-EKxx xx = Adapter diameter/(pin)

A = Adapter diameter

B = Thread diameter B max= A/2





Insert Support Item	A Adapter diameter (mm)	Threaded insert Item	B Thread diameter (mm)	Max. force in combination
<b>MCR-15.9</b>	15,9	<b>MCR-15.9-Ex</b>	3-8 mm Ø	20 kN
<b>MCR-20</b>	20	<b>MCR-20-Ex</b>	3-8 mm Ø	20 kN
<b>MCR-30</b>	30	<b>MCR-30-Ex</b>	3-16 mm Ø	50 kN
<b>MPC-31.8</b>	31.8	<b>MPC-31.8-Ex</b>	3-16 mm Ø	50 kN
<b>MCR-32</b>	32	<b>MCR-32-Ex</b>	3-16 mm Ø	50 kN
<b>MCR-36</b>	25	<b>MCR-36-Ex</b>	3-16 mm Ø	50 kN
<b>MCR-38</b>	38	<b>MCR-38-Ex</b>	3-16 mm Ø	50 kN
<b>MCR-40</b>	40	<b>MCR-40-Ex</b>	3-22 mm Ø	100 kN
<b>MCR-50</b>	50	<b>MCR-50-Ex</b>	3-22 mm Ø	200 kN
<b>MCR-60</b>	60	<b>MCR-60-Ex</b>	3-28 mm Ø	250 kN
<b>MCR-70</b>	70	<b>MCR-70-Ex</b>	3-32 mm Ø	400 kN
<b>MCR-80</b>	80	<b>MCR-80-Ex</b>	3-32 mm Ø	500 kN

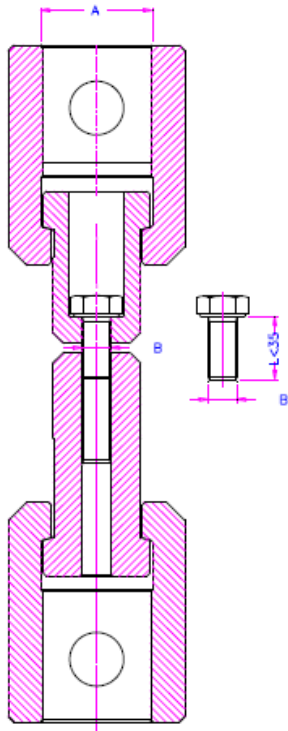
\* Also available as open version test with 50 kN (article no. MCR-318-o) the elastic deformation of the gap with 50 kN is 0.1 mm

We recommend using a ring in loads from 50 kN to 100 kN

### Testing of short cap screws

#### MCR-A-EKB

A = coupling size  
 B = screw Ø, according to customer requirements



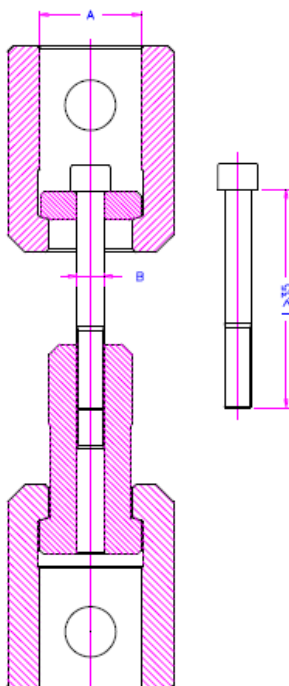
MCR-EK-insert



MCR-EK3

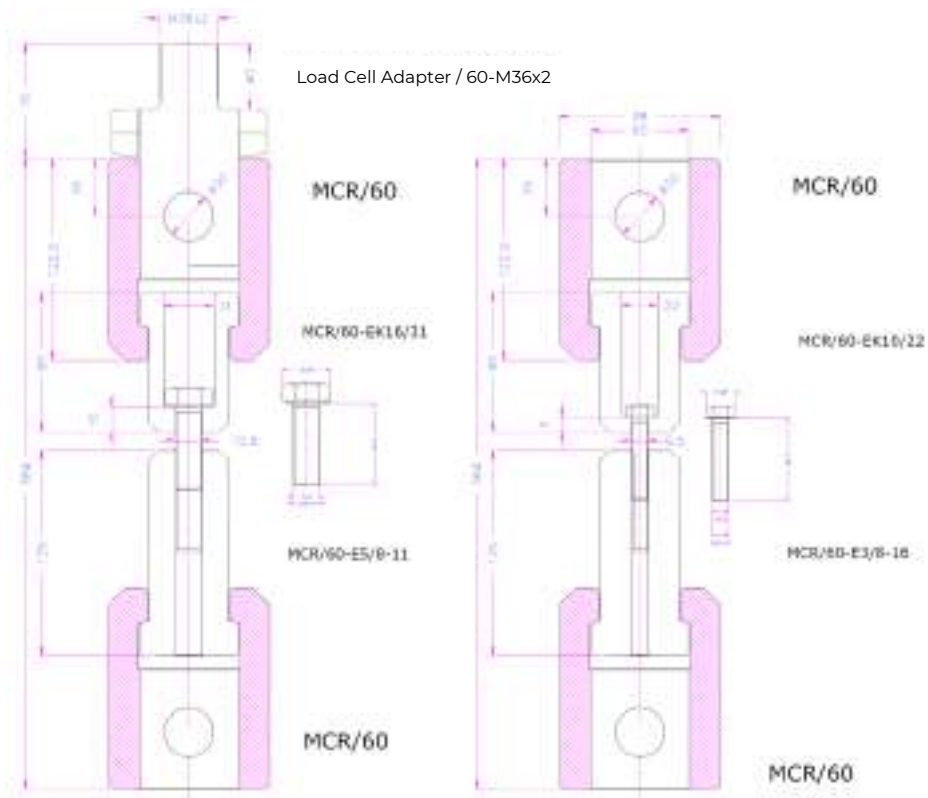
### Testing of long cap screws

#### MCR-A-EPB

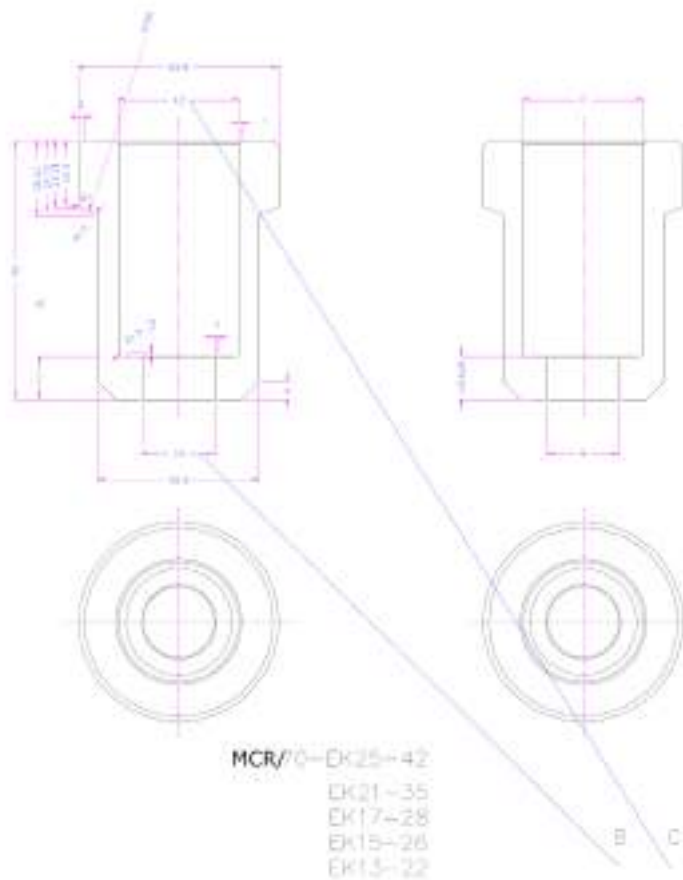


Washer

<b>Grips for threaded heads</b>	
Additional sizes and threads on request	
<b>MCR/15.9 and MCR/20</b>	
MCR/15.9	Adaptador p/inserción de rosca hasta 15,9 mm Ø 1 pair (5/8")
MCR/20	Adaptador para inserción de rosca hasta 20 mm Ø 1 pair
MCR/15.9-EMx	Insertos roscados para MCR/15.9 y MCR/20 x=M3, M4, M5, M6, M8 Otras roscas bajo pedido
<b>MCR/30</b>	
MCR/30	Adapter for thread inset up to 30 mm Ø 1 pair
MCR/30-EMx	Thread insets for MCR-30 x = M3, M4, M5, M6, M8, M10, M12, M14 and UNF
<b>MCR/31.8, MCR/36, MCT/38, MCR/40</b>	
MCR/31.8	Adapter for thread inset up to 31.8 mm Ø 1 pair (10/8")
MCR/32	Adapter for thread inset up to 32 mm Ø 1 pair
MCR/36	Adapter for thread inset up to 36 mm Ø 1 pair
MCR/38	Adapter for thread inset up to 38 mm Ø 1 pair
MCR/40	Adapter for thread inset up to 40 mm Ø 1 pair
MCR/318-EMx	Threaded inserts for MCR/31.8/32/36/38/40 until M16
MCR/318-EKx	head screw inserts p/MCR/318/32/36/38/40 x=3
<b>MCR/50</b>	
MCR/50	Adapter for thread inset up to 50 mm Ø 1 pair of spherical seat
MCR/50-EMx	Thread inserts for MCR/50 until M16
<b>MCR/60</b>	
MCR/60	Adapter for thread inset up to 60 mm Ø 1 pair of spherical seat
MCR/60-EMx	Thread inserts for MCR/60 hasta M24
<b>MCR/70</b>	
MCR/70	Adapter for thread inset up to 70 mm Ø 1 pair of spherical seat
MCR/70-EM	Thread inserts for MCR/70 until M30
<b>MCR/80</b>	
MCR/80	Adapter for thread inset up to 80 mm Ø 1 pair of spherical seat
MCR/80-EM	Thread inserts for MCR/80 until M40
MAR/565-60	Support open on one side
MAR/60-EARB	4 part insert



Solutions using extra adapter for M36x







Insert holder  
MCR-15.9



Threaded insert with specimen



Threaded insert  
MCR-15.0-EM6



MCR/...-EK  
Threaded Head Inserts

**MCR bracket and insert weights:**

Insert Support:	Weight:
MCR-15.9-GT (5/8")	83 g
MCR -20-GT	108 g
MCR -30-GT	490 g
MCR -31.8-GT (10/8")	563 g
MCR -32-GT	554 g
MCR -36-GT	725 g
MCR -38-GT	695 g
MCR -40-GT	780 g
MCR -50-GT	1900 g
MCR -60-GT	4400 g

Threaded inserts for MCR -15.9 holder:	Weight:
MCR -15.9-EM2	25 g
MCR -15.9-EM3	26 g
MCR -15.9-EM4	27 g
MCR -15.9-EM5	25 g
MCR -15.9-EM6	23 g
MCR -15.9-EM8	21 g
MCR -15.9-EM10	15 g

Threaded inserts for Soporte MCR-30 holder:	Weight:
MCR-30-EM5	226 g
MCR -30-EM6	222 g
MCR -30-EM8	218 g
MCR -30-EM10	214 g
MCR -30-EM16	153 g

Threaded inserts for MCR-31.8, -32, -36/18, -38/16 holder:	Weight:
MCR -31.8-EM3	213 g
MCR -31.8-EM4	222 g
MCR -31.8-EM5	225 g
MCR -31.8-EM6	230 g
MCR -31.8-EM8	228 g
MCR -31.8-EM10	217 g
MCR -31.8-EM12	212 g
MCR -31.8-EM14	200 g
MCR -31.8-EM16	185 g
MCR -31.8-EM16	150 g
MCR -31.7-E1/4-20UNC	228 g
MCR -31.8-E3/8-24UNF	217 g
MCR -31.8-E1/2-20	190 g
MCR -31.8-E3/4-10UNC	150 g

Threaded inserts for MCR -40 holder:	Weight:
MCR -40-EM6	295 g
MCR -40-EM8	302 g
MCR -40-EM10	295 g
MCR -40-EM12	280 g
MCR -40-EM16	330 g

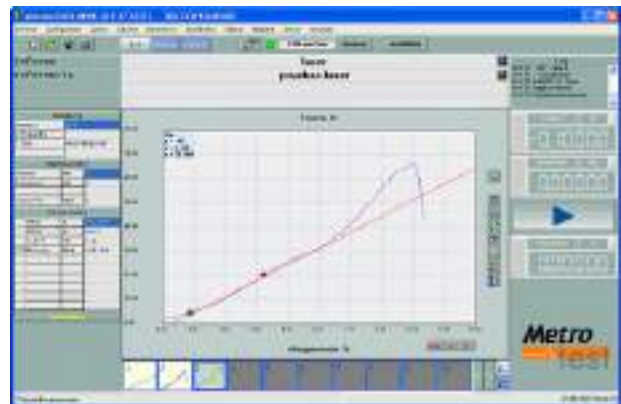
Threaded inserts for MCR-50 holder:	Weight:
MCR -50-EM5	747 g
MCR -50-EM6	730 g
MCR -50-EM8	740 g
MCR -50-EM10	723 g
MCR -50-EM12	730 g
MCR -50-EM14	731 g
MCR -50-EM16	700 g
MCR -50-EM18	680 g
MCR -50-EM20	630 g

Threaded inserts for MCR-60 holder:	Weight:
MCR -60-EM6	1440 g
MCR -60-EM8	1436 g
MCR -60-EM10	1480 g
MCR -60-EM12	1665 g
MCR -60-EM14	1570 g
MCR -60-EM16	1543 g
MCR -60-EM18	1550 g
MCR -60-EM20	1500 g
MCR -60-EM24	1415 g

Threaded inserts for MCR-70 holder:	Weight:
MCR -70-EM10	2575 g
MCR -70-EM18	2440 g



Recommended Testing Machines:



MetroTEST Testing Software



**CONTENTS OF THE STANDARD SUPPLY:**

- \* Manual Quick Fit Grips Tensile Tests with threaded head series MCR\_20-500 chosen model.