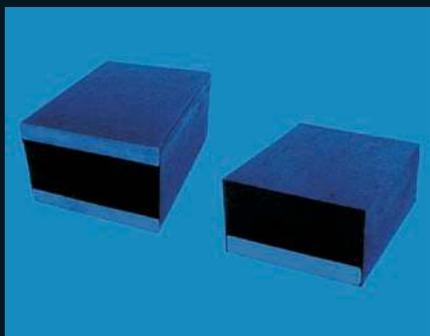


Gumetall



DE EN



GuMetall - über 10 JAHRE ERFAHRUNG

Unternehmensprofil:

Die Firma GuMetall befasst sich mit der Herstellung und dem Vertrieb von Spezialanfertigungen und Standard Gummi-Metall-Puffern, Gummi-Puffer, Gummi-Metall-Schienen, Maschinenfüße, Dichtringe, verschiedene Gummiformteile und extrudierte Gummi-Profile.

Unsere Produkte sind aus NR, SBR, NBR, CR, EPDM, VMQ/SI und FPM-Kautschuk gefertigt und in einer Härte zwischen 35 und 85 Shore realisierbar. Die Toleranzmessung erfolgt nach ISO 3302-1 M3, M4.

Unser Katalog umfasst Auszüge aus dem Standard-Programm und stellt nicht den vollen Lieferumfang dar. Bitte kontaktieren Sie uns individuell – eine große Auswahl an Standardteilen und jegliche Spezialanfertigungen nach Muster, Zeichnung oder Spezifikation warten auf Sie!

Unternehmensgeschichte

GuMetall Kft wurde von Zsolt Juhász und Csongor Horváth im Jahre 2004 gegründet. Der Standort befindet sich in Nagytarcsa, Ungarn. Innerhalb weniger Jahre expandierte GuMetall Kft zu einem internationalen Einlieferer von Gummi, von Gummi-Metall-Schwingungspuffern, und von technischen Elementen. Heute agiert die GuMetall Kft. mit Produktionsbetrieben in Ungarn und Handelsbüros in Ungarn und In Deutschland. Wir liefern unsere Produkte weltweit in Europa, in Afrika, in den USA, in Neu-Seeland und in Australien.

Auf neuestem Stand ausgestattete Produktionsanlagen, Flexibilität, hohe Prüf- und Testkompetenz und zuverlässiger Service sichern das kontinuierliche Wachstum des Unternehmens.

Qualitätsmanagement:

Unser Qualitätsstandard ist mit dem Zertifikat nach ISO 9001 ausgewiesen.

GuMetall – Over 10 YEARS OF EXPERIENCE

Company profile:

The GuMetall Kft. manufacturing standard metal-rubber vibration dampers, rubber buffers, rubber-metal rails, machine feet and mounts, sealing rings, different compressed moulded rubber products and extruded rubber profiles.

Our products are made from NR, SBR, NBR, CR, EPDM, VMQ/SI, and FPM caoutchouc. Their compression characteristics are between 35 and 85 Shores. The measurement tolerance of our products meet the requirements of ISO 3302-1 M3, M4.

Even if you don't find the right product in our catalogue, maybe we are already supplying it, just contact us! Otherwise we are taking orders to manufacturing different articles, following drawings or sample pieces.

History:

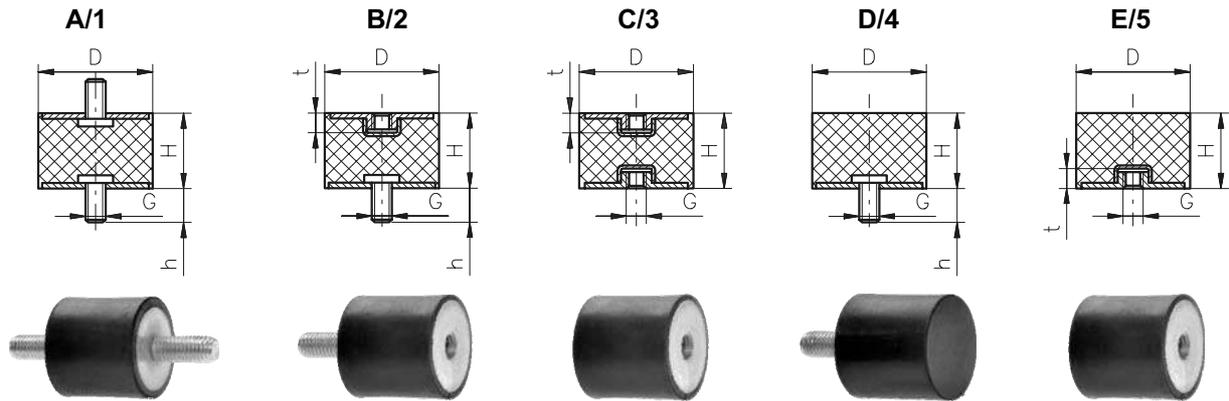
GuMetall Kft. was founded in 2004 by Mr. Zsolt Juhász and by Mr. Csongor Horváth. Head office is based in Nagytarcsa, Hungary. Within a few years GuMetall became an international supplier of rubber and rubber-metal antivibration parts and technical elements. Today GuMetall has a production plant in Hungary and sales offices in Hungary and Germany. The enterprise delivers it's products to Europe, North-Africa, USA, New-Zeeland and Australia. Modern and efficient production facility, flexibility, quality orientated work flows and reliable service are the basis for the continuous growth of the company.

Quality management

GuMetall is certified according to ISO 9001.

		Natural Rubber	Styrene-Butadiene Rubber	Ethylene-Propylene-Diene Monomer	Nitrile-Butadiene Rubber	Chloroprene Rubber	Silicone Elastomer	Fluorocarbon Rubber	Short name		
Bezeichnung		NR	SBR	EPDM	NBR	CR	VMQ/SI	FPM	Short name		
Mechanische Eigenschaften bei Raumtemperatur	Härte Shore A	35-85	35-85	35-85	35-85	35-85	35-85	60-85	Hardness Shore A		
	Zugfestigkeit	●	◐	◑	◒	◓	◔	◕	Tensile Strength		
	Zugdehnung	●	◐	◑	◒	◓	◔	◕	Tear stretching		
	Rückprall-elastizität	●	◐	◑	◒	◓	◔	○	Reboundance elasticity		
	Abrieb-beständigkeit	◐	◑	◒	◓	◔	◕	◖	Attrition-resistance		
Temperaturbeständigkeit		-40°C +80°C	-30°C +110°C	-40°C +150°C	-30°C +120°C	-30°C +120°C	-60°C +150°C	-30°C +225°C	Temperature interval		
Beständigkeit	Benzin	○	◐	○	◒	◓	◔	●	Petrol		
	Mineralöl	○	◐	◑	●	◓	◔	●	Mineral oil		
	Säure (25% H2SO4 50°C)	◐	◑	●	◒	◓	◔	●	Acid (25% H2SO4 50°C)		
	Laugen (25% NaOH 50°C)	◐	◑	●	○	◓	○	●	Alkali (25% NaOH 50°C)		
	Wasser (100°C)	◐	◑	●	◒	◓	◔	◕	Water (at 100°C)		
	Ozon	◐	◑	●	◒	◓	●	●	Ozon		
	UV	◐	◑	◒	◓	◔	●	●	UV		
Gasdurchlässigkeit		◐	◑	◒	◓	◔	○	●	Permeability to gases		

Legende				Legend			
●	Excellent	◐	Good	◐	Satisfactory	○	Inadequate
	Sehr gut	◑	Gut	◓	Befriedigend	○	Ungenügend
◐	Sufficient	◒	Poor	○	Inadequate		
	Ausreichend	◓	Mangelhaft				



D	H	1	2	3	4	5	G	h	t
8	8	•	•	•	•	•	M3	6	3
10	10	•	•	○	•	•	M4	10	4
10	15	•	•	•	•	•			
15	8	•	•	○	•	•	M4	10	4
15	9	•	•	○	•	•			
15	10	•	•	•	•	•			
15	15	•	•	•	•	•			
15	20	•	•	•	•	•			
15	25	•	•	•	•	•			
15	30	•	•	•	•	•	M6	16	
18	7,5	○	○	○	•	○			
20	5	○	○	○	•	○			
20	8	•	○	○	•	•			
20	10	•	○	○	•	•			
20	12	•	•	○	•	•			
20	13,5	•	•	○	•	•			
20	15	•	•	○	•	•			
20	20	•	•	•	•	•			
20	25	•	•	•	•	•			
20	30	•	•	•	•	•			
25	10	•	○	○	•	•	M6 M8	18 20	6 8
25	15	•	•	○	•	•			
25	17	•	•	•	•	•			
25	20	•	•	•	•	•			
25	25	•	•	•	•	•			
25	30	•	•	•	•	•			
25	35	•	•	•	•	•	M8	20	8
30	15	•	•	○	•	•			
30	17	•	•	•	•	•			
30	20	•	•	•	•	•			
30	25	•	•	•	•	•			
30	28	•	•	•	•	•			
30	30	•	•	•	•	•			
30	35	•	•	•	•	•			
30	40	•	•	•	•	•			

D	H	1	2	3	4	5	G	h	t
40	10	○	○	○	●	●	M8 M10	23 28	8 10
40	15	●	○	○	●	●			
40	20	●	●	○	●	●			
40	25	●	●	●	●	●			
40	28	●	●	●	●	●			
40	30	●	●	●	●	●			
40	40	●	●	●	●	●			
50	20	●	●	○	●	●	M10	28	10
50	30	●	●	●	●	●			
50	40	●	●	●	●	●			
50	45	●	●	●	●	●			
50	50	●	●	●	●	●			
60	20	●	●	○	●	●	M10	28	10
60	25	●	●	○	●	●			
60	50	●	●	●	●	●			
70	45	●	●	●	●	●	M10	25	10
70	50	●	●	●	●	●			
75	25	●	●	○	●	●	M12	37	12
75	40	●	●	●	●	●			
75	50	●	●	●	●	●			
80	30	●	●	●	●	●	M14	37	14
80	40	●	●	●	●	●			
80	70	●	●	●	●	●			
100	40	●	●	●	●	●	M16	41	16
100	55	●	●	●	●	●			
100	75	●	●	●	●	●			
100	100	●	●	●	●	●			
150	40	●	●	○	●	●	M20	46	20
150	75	●	●	●	●	●			
150	100	●	●	●	●	●			

Bis Ø 30 sind Schraube/Unterlagsscheibe aus einem Stück gefertigt. Grössere sind mehrteilig gefertigt. Bis Gewinde M10 sind diese mit dem Innengewinde tiefgezogen, darüber ist es mehrteilig.

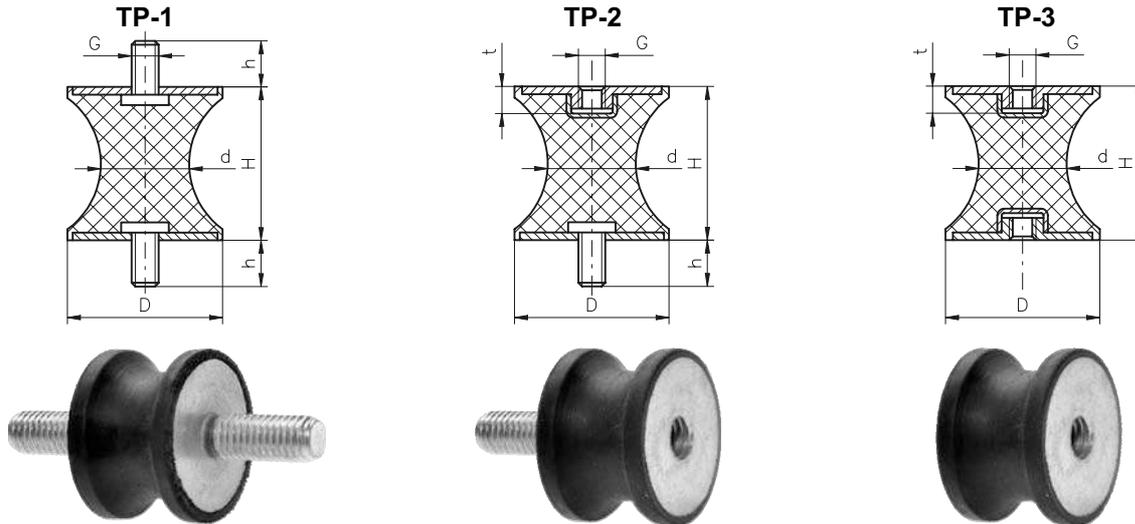
The screw and the metal washer made from one piece of material up to D=30, above it they are from two part. Until G=M10 the washer with the female screw made with deep drawing, above it they are from several parts.

Das Sortiment unseres Werkzeugsbestand wird kontinuierlich vergrössert. Falls Sie Ihre gewünschte Abmessung im Datenblatt nicht finden, so richten Sie bitte Ihre Anfrage an uns.

The selection of our tools is continuously widening. In case of size not shown by our data sheet, please contact us. We are able to manufacture articles, which meet your requirements.

Gummiqualität / Rubber quality:
Metalleigenschaften / Metal finish:
Härte / Hardness:

NR, NBR, CR, EPDM
 St37 verzinkt / St37 galvanized
 40, 55, 70 Shore A



D/d-H	D	d	H	G	h	t
10/8-10	10	8	10	M4	10	4
20/15-19	20	15	19	M6	18	6
26/18-28	26	18	28	M8	20	8
30/22-20	30	22	20	M8	20	8
40/25-30	40	25	30	M8	23	8

Gummiqualität / Rubber quality:
 Metalleigenschaften / Metal finish:
 Härte / Hardness:

NR, NBR, CR, EPDM
 St37 verzinkt / St37 galvanized
 40, 55, 70 Shore A

DS-Füße

DS mounts



D/H	D	H	G	h	t
25/18	25	18,5	M6	18	6
40/28	40	28,5	M8	23	8
50/28	50	28,5	M10	28	10

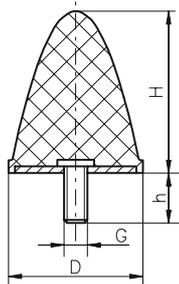
Gummiqualität / Rubber quality:
 Metalleigenschaften / Metal finish:
 Härte / Hardness:

NR, NBR, CR, EPDM
 St37 verzinkt / St37 galvanized
 40, 55, 70 Shore A

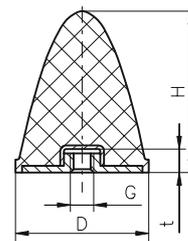
Parabelpuffer

Parabolic dampers

KP-4



KP-5



D/H	D	H	G	h	t
20/20	20	20	M6	18	6
20/24	20	24	M6	18	6
30/30	30	30	M8	20	8
30/36	30	36	M8	20	8
50/61	50	61	M10	28	10
75/89	75	89	M12	37	12

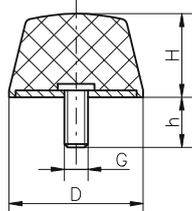
Gummiqualität / Rubber quality:
Metalleigenschaften / Metal finish:
Härte / Hardness:

NR, NBR, CR, EPDM
 St37 verzinkt / St37 galvanized
 40, 55, 70 Shore A

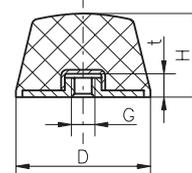
Anschlagpuffer konisch

Conical dampers

K-4



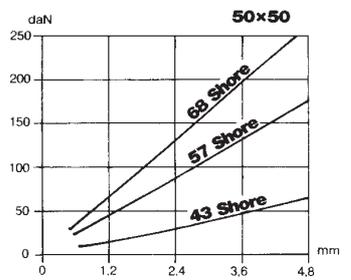
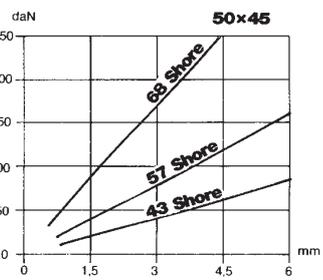
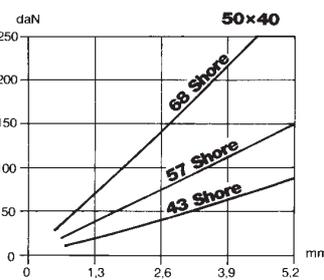
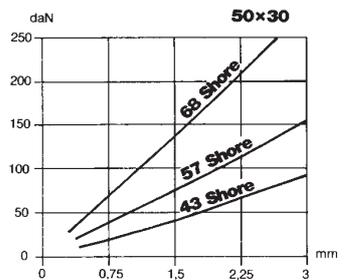
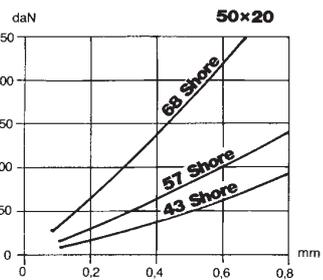
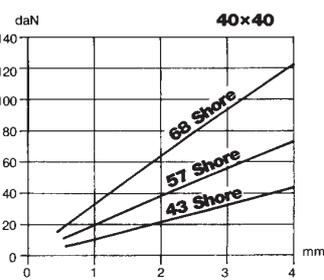
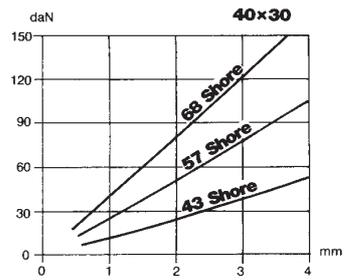
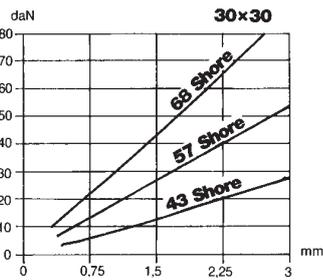
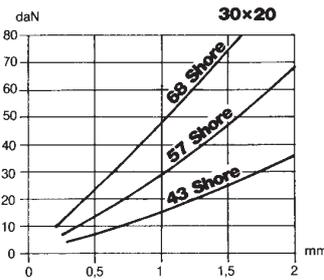
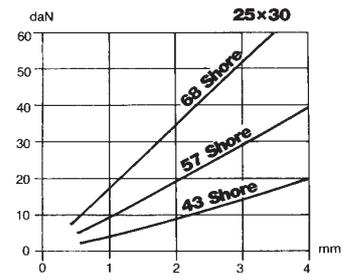
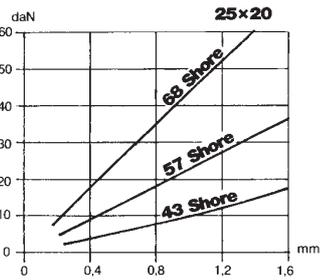
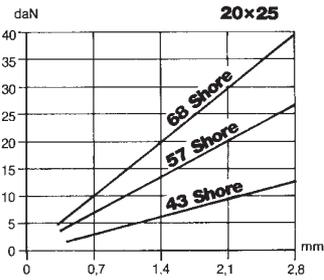
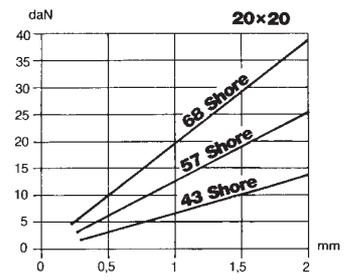
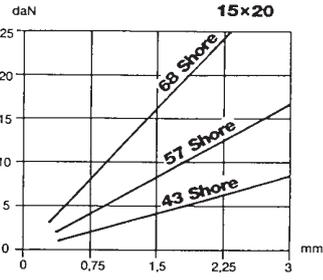
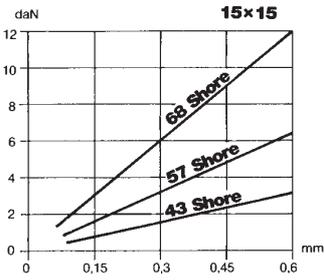
K-5

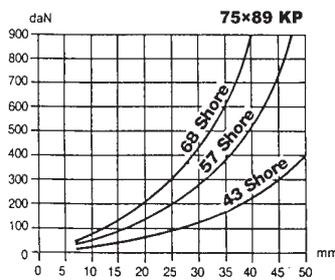
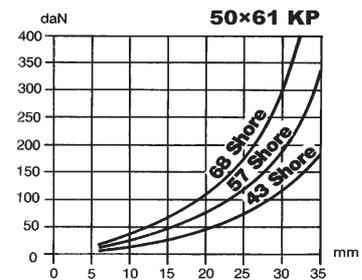
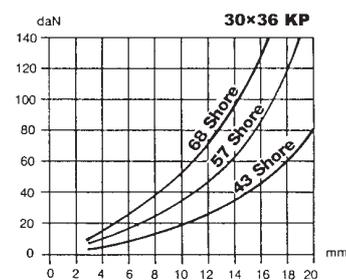
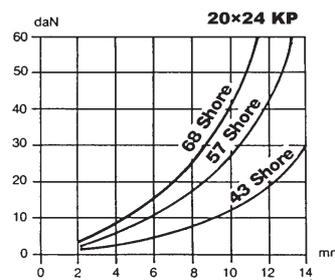
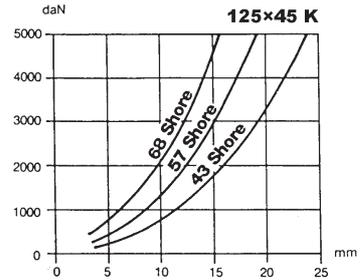
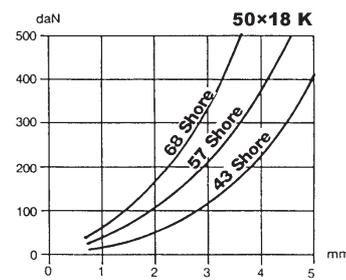
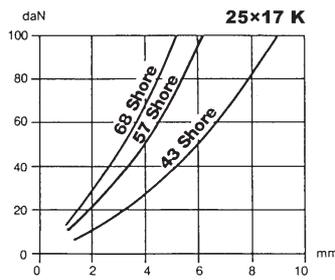
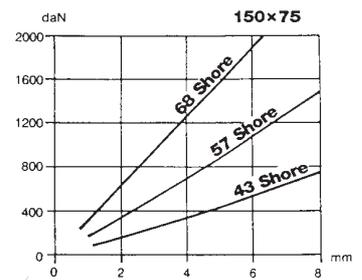
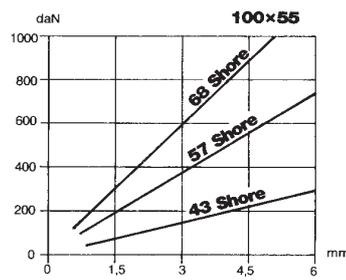
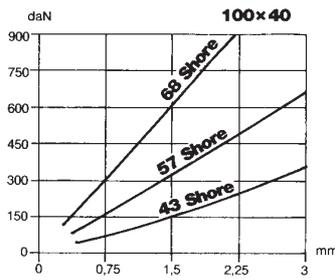
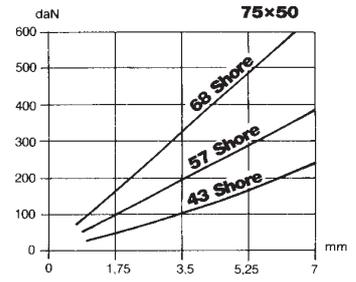
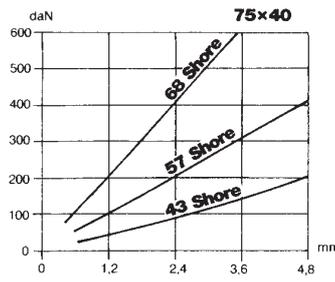
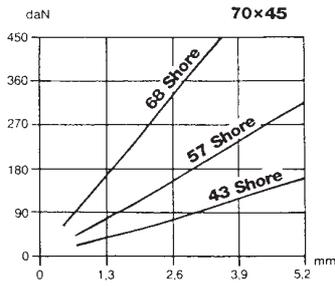


D/H	D	H	G	h	t
25/17	25	17	M6	18	6
50/18	50	18	M10	28	10
125/45	125	45	M16	46	16

Gummiqualität / Rubber quality:
Metalleigenschaften / Metal finish:
Härte / Hardness:

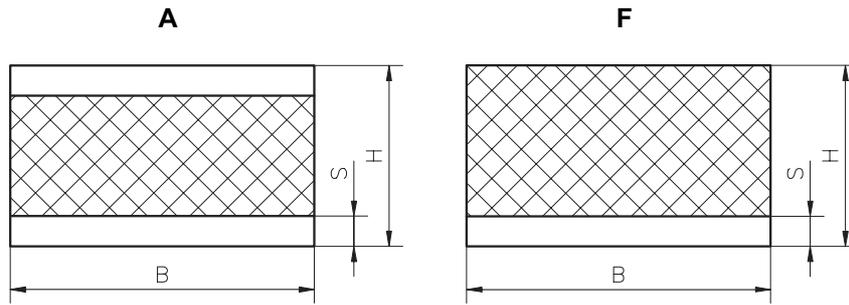
NR, NBR, CR, EPDM
 St37 verzinkt / St37 galvanized
 40, 55, 70 Shore A





Die Belastungsdiagramme sind gültig für den zylindrischen Gummi Puffer Typ 2. Die angezeigten Daten sind nur zum Information.

The diagrams of cylindrical dampers are valid for Type 2. The above load diagrams made only for information.



B*H*L	B	H	S		
			5	10	15
20*30*2000	20	30	●	○	○
25*25*2000	25	25	●	○	○
25*30*2000	25	30	●	●	○
30*20*2000	30	20	●	○	○
30*30*2000	30	30	●	●	○
40*20*2000	40	20	●	○	○
40*30*2000	40	30	●	●	○
40*35*2000	40	35	●	●	○
40*40*2000	40	40	●	●	○
50*30*2000	50	30	●	●	○
50*35*2000	50	35	●	●	○
50*40*2000	50	40	●	●	○
50*45*2000	50	45	●	●	○
50*50*2000	50	50	●	●	○
50*60*2000	50	60	●	●	○
50*70*2000	50	70	●	●	○
60*20*2000	60	20	●	○	○
60*30*2000	60	30	●	●	○
60*35*2000	60	35	●	●	○
60*40*2000	60	40	●	●	○
60*50*2000	60	50	●	●	○
60*60*2000	60	60	●	●	○
60*70*2000	60	70	●	●	○
60*80*2000	60	80	●	●	○
70*30*2000	70	30	●	●	○
70*40*2000	70	40	●	●	○
70*50*2000	70	50	●	●	○
70*60*2000	70	60	●	●	○

B*H*L	B	H	S		
			5	10	15
70 *70*2000	70	70	●	●	○
70 *80*2000	70	80	●	●	○
80 *40*2000	80	40	●	●	○
80 *50*2000	80	50	●	●	○
80 *60*2000	80	60	●	●	○
80 *70*2000	80	70	●	●	○
80 *80*2000	80	80	●	●	○
100 *40*2000	100	40	○	●	●
100 *50*2000	100	50	○	●	●
100 *60*2000	100	60	○	●	●
100 *70*2000	100	70	○	●	●
100 *80*2000	100	80	○	●	●
100 *90*2000	100	90	○	●	●
100*100*2000	100	100	○	●	●
120 *45*2000	120	45	○	●	●
120 *50*2000	120	50	○	●	●
120 *60*2000	120	60	○	●	●
120 *70*2000	120	70	○	●	●
120 *80*2000	120	80	○	●	●
150 *50*2000	150	50	○	●	●
150 *60*2000	150	60	○	●	●
150 *70*2000	150	70	○	●	●
150 *80*2000	150	80	○	●	●
150 *90*2000	150	90	○	●	●
150*100*2000	150	100	○	●	●
200 *60*2000	200	60	○	●	●
200 *80*2000	200	80	○	●	●
200*100*2000	200	100	○	●	●

Gummiqualität / Rubber quality:

Toleranz / Tolerance

Oberflächenschutz Metall / Metal finish:

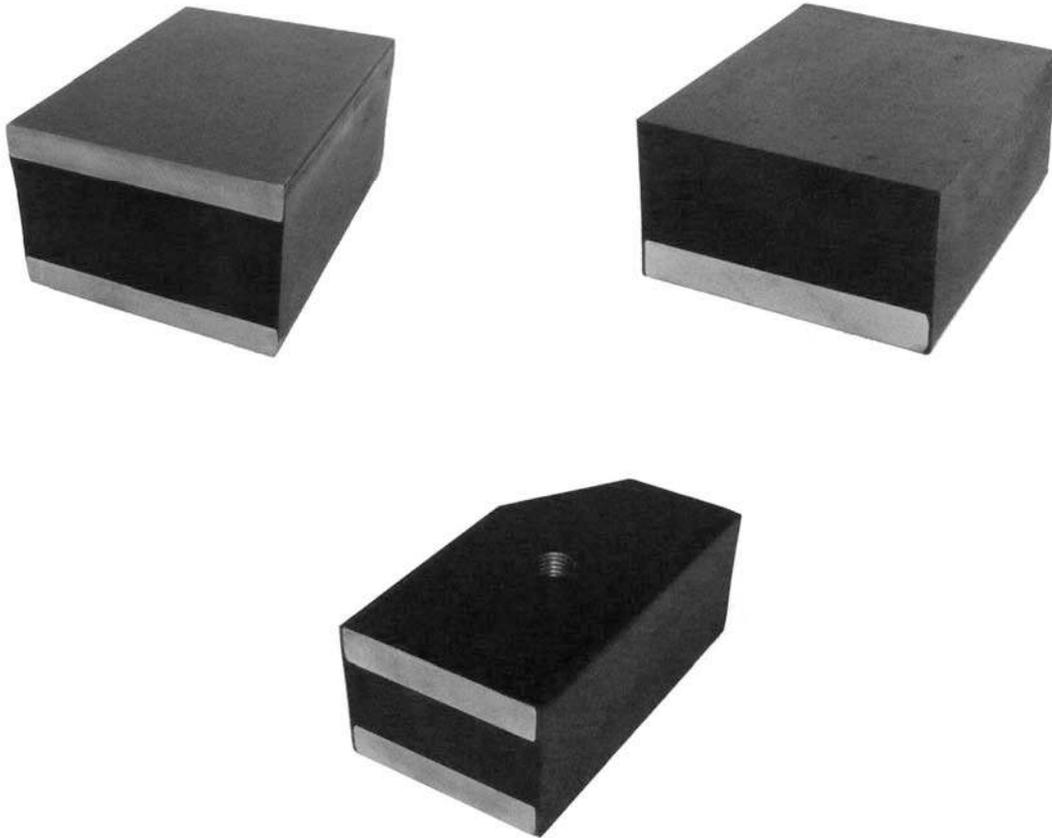
Härte / Hardness:

NR, NBR, CR, EPDM

ISO 3302-1 M4

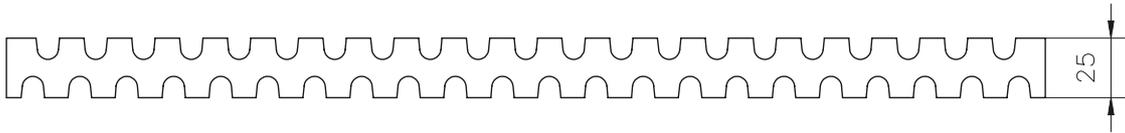
Schwarz lackiert / Black, painted

40, 55, 70 Shore A



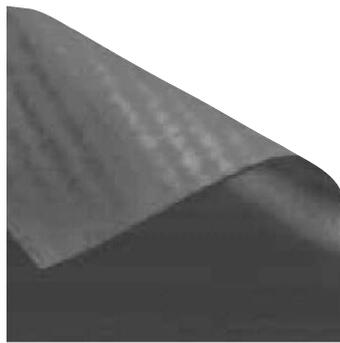
Auf Wunsch erledigen wir für Sie zusätzlich die Bearbeitung der Schienen wie: Zuschnitte, Löcher oder Gewinde bohren.

We are able to cut or drill the rails and drill thread into metal parts, according to customer requirements. Please feel free to ask our quotation!



Format	Dicke	Gummiqualität
width*length	Thickness	Rubber quality
100*500 mm	25 mm	CR55

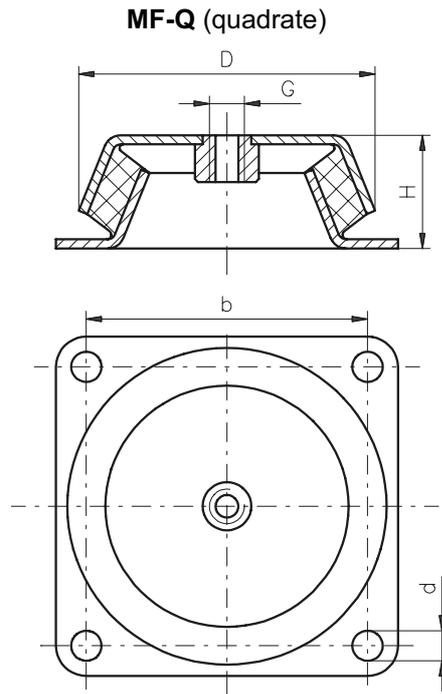
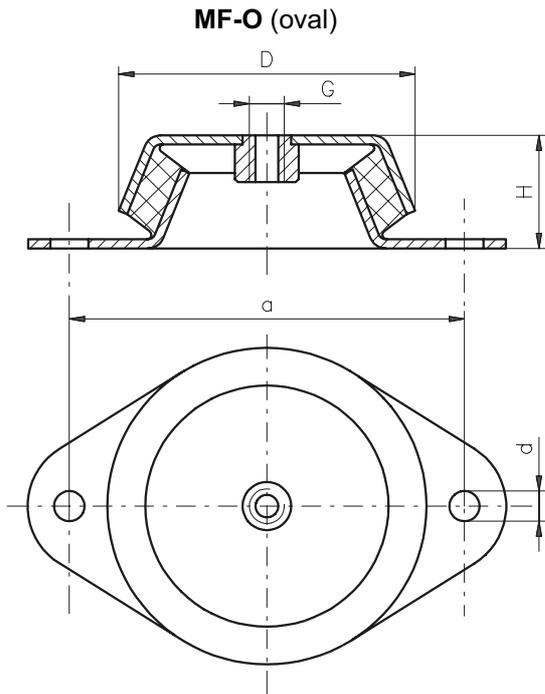




max. Breite*max. Lange	Dicke	Gummiqualität
max. width*max. length	Thickness	Rubber quality
1400 (1200)*5000 (10000) mm	2-40 mm	SBR, NBR, CR, EPDM, FPM

Wir können aus der Platte verschiedene Größen und Formen ausschneiden. We are able to cut for different sizes and shapes.



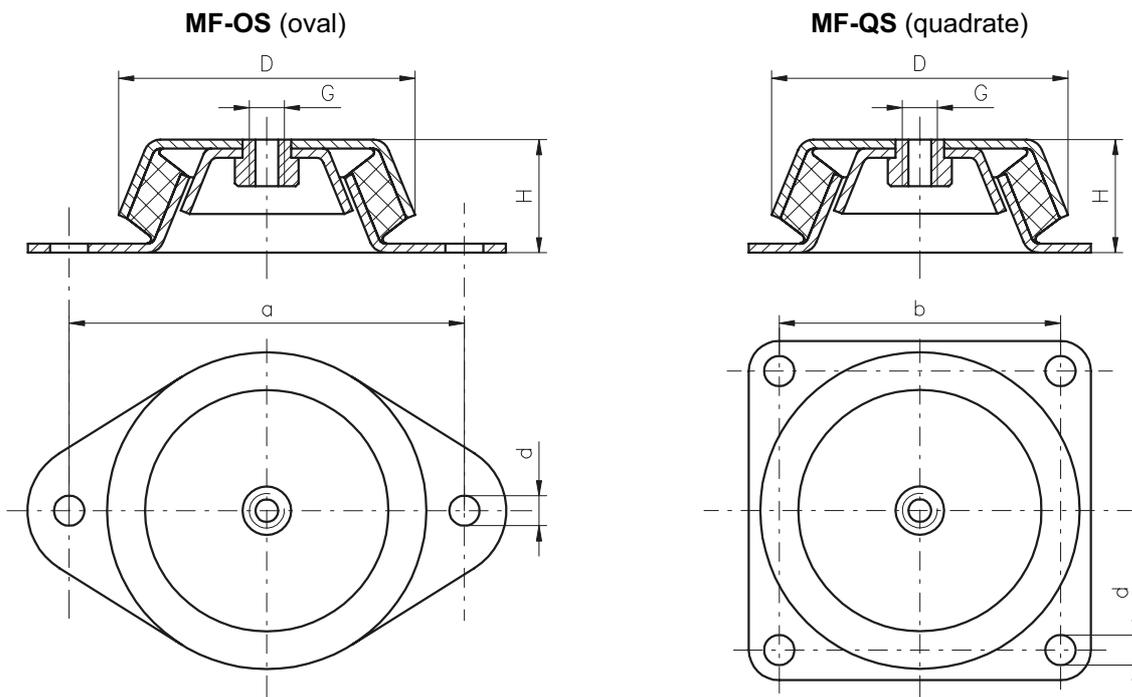


D/H	D	H	d	G	a	b	Load (daN) NK60
65/30	65	30	8,2	M10	85	55	200
94/45	94	45	10,2	M12	110	80	300
110/39	110	39	12,4	M12	140	100	400
162/60	162	60	16,2	M16	200	145	1000

Gummiqualität / Rubber quality:
Oberflächenschutz / Metal finish:
Gummihärte / Hardness:

NR
 verzinkt / galvanized
 60 Shore A



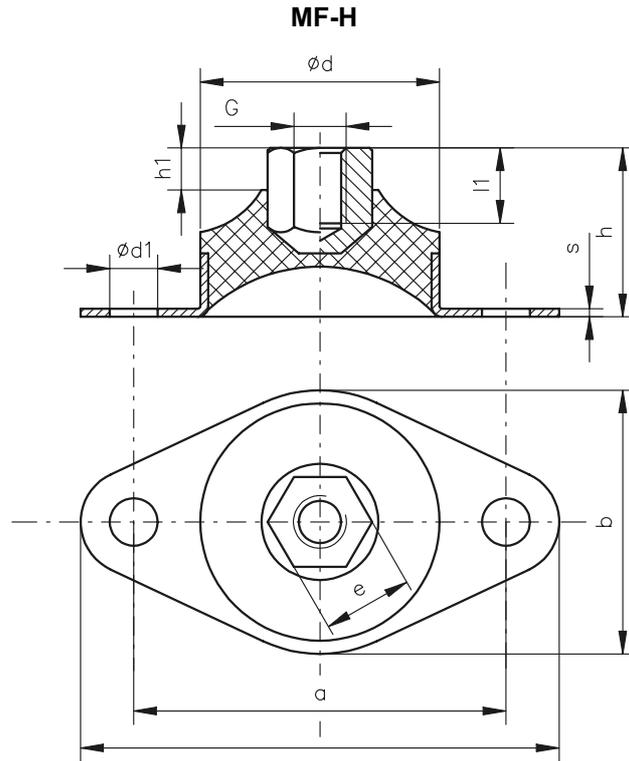


D/H	D	H	d	G	a	b	Load (daN) NK60
65/30	65	30	8,2	M10	85	55	200
94/45	94	45	10,2	M12	110	80	300
110/39	110	39	12,4	M12	140	100	400
162/60	162	60	16,2	M16	200	145	1000

Gummiqualität / Rubber quality:
Oberflächenschutz / Metal finish:
Gummihärte / Hardness:

NR
verzinkt / galvanized
60 Shore A





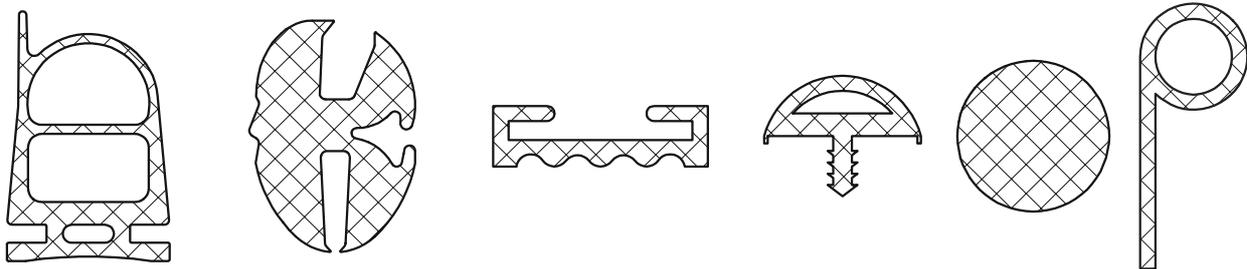
d	b	h	l	a	d1	h1	G	l1	E	s
45	50	32	90	70	9	8	M10	16	SW17	1,5

Gummiqualität / Rubber quality:
 Oberflächenschutz / Metal finish:
 Gummihärte / Hardness:

NR
 verzinkt / galvanized
 40, 55, 70 Shore A

Profiles

Profile

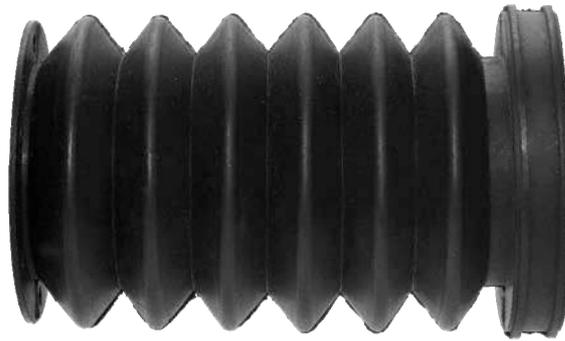
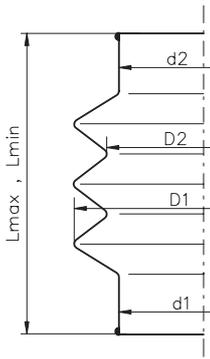


We are manufacturing profiles from wide range of materials and in forms to meet customers' specifications.

Wir fertigen nach Zeichnungen oder nach Muster Profile gerne Ihrer Wunschprofile.

Gummiqualität / Rubber quality:
 Härte / Hardness:

SBR, EPDM, NBR, CR, VMQ
 45-80 Shore A



Wir fertigen nach Zeichnungen oder nach Muster Faltenbälge.

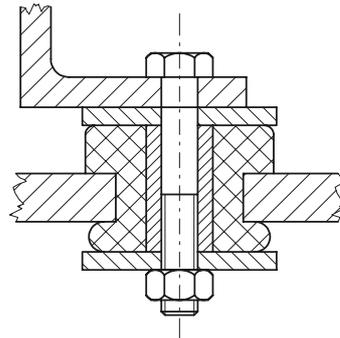
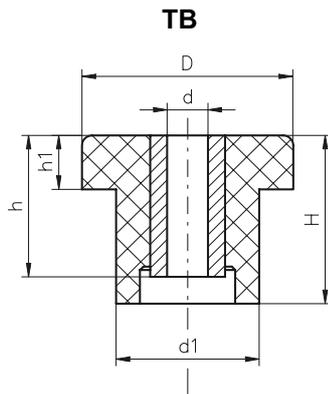
We are able to manufacturing bellows to meet our customers' requirements following drawings with size data or sample pieces.

Gummiqualität / Rubber quality:

NBR, CR, EPDM

T-Buchsen

T-bushings



D/H	D	H	d	h	d1	h1
28/20	28	20,6	10	17,5	20,6	5,6
44/30	44,5	30,5	13	25,4	31,5	10,4
50/40	50,6	43	13	35	34,3	13,5
63/50	63,5	50,8	16	44,5	41,1	15,7
95/60	95	60	20	50,8	56,6	25,4

Gummiqualität / Rubber quality

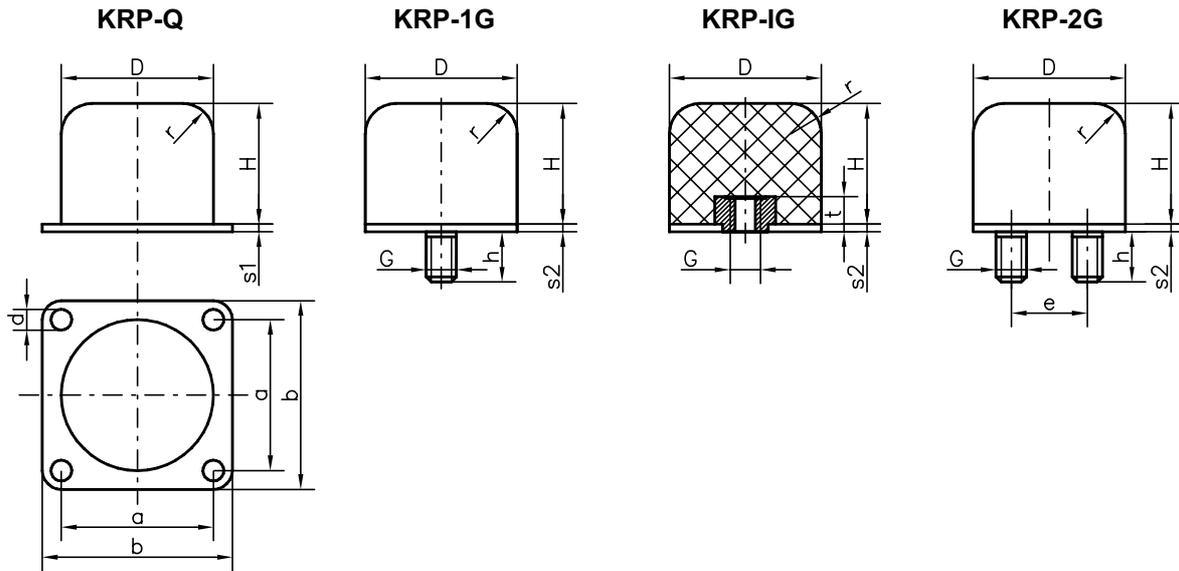
Metallteil / Washer:

Härte / Hardness:

NR, NBR, CR, EPDM

Natur / Blank

40, 55, 70 Shore A

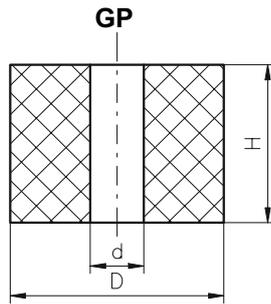


Type	D	H	a	b	d	G	e	h	r	s1	s2	t
40x32	40	32	40	50	5,5	M8	-	23	8	2	2	8
50x40	50	40	50	63	6,5	M10	-	28	10	3	2	10
63x50	63	50	63	80	6,5	M10	-	28	12,5	4	3	10
80x63	80	63	80	100	9	M12	-	37	18	5	3	12
100x80	100	80	100	125	9	M12	50	36	20	6	4	12
125x100	125	100	125	160	11	M16	63	36	25	6	4	16
160x125	160	125	160	200	11	M16	80	44	32	8	6	16
200x160	200	160	200	250	13	M20	100	44	40	8	6	18

Gummiqualität / Rubber quality:
Metalleigenschaften / Metal finish:
Härte / Hardness:

NR, NBR, CR
 St37 verzinkt oder Schwarz lackiert / St37 galvanized or black painted
 70 Shore A





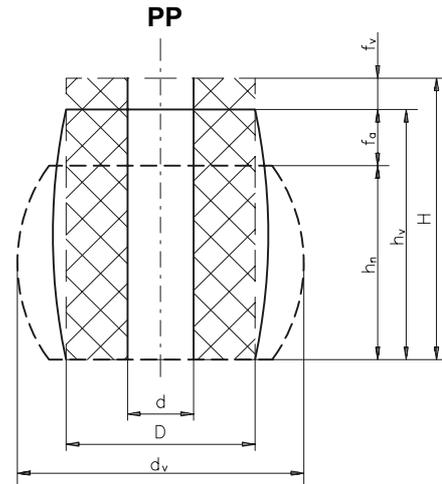
D/d-H	D	d	H
16/ 6,5-12	16	6,5	12
16/ 6,5-16			16
16/ 6,5-20			20
16/ 6,5-25			25
20/ 8,5-16	20	8,5	16
20/ 8,5-20			20
20/ 8,5-25			25
20/ 8,5-32			32
25/ 10,5-20	25	10,5	20
25/ 10,5-25			25
25/ 10,5-32			32
25/ 10,5-40			40
32/ 13,5-32	32	13,5	32
32/ 13,5-40			40
32/ 13,5-50			50
32/ 13,5-63			63
40/ 13,5-32	40	13,5	32
40/ 13,5-40			40
40/ 13,5-50			50
40/ 13,5-63			63
40/ 13,5-80			80
50/ 17- 32			50
50/ 17- 40	40		
50/ 17- 50	50		
50/ 17- 63	63		
50/ 17- 80	80		
50/ 17- 100	100		

D/d-H	D	d	H		
63/ 17- 32	63	17	32		
63/ 17- 40			40		
63/ 17- 50			50		
63/ 17- 63			63		
63/ 17- 80			80		
63/ 17- 100	80	21	100		
63/ 17- 125			125		
80/ 21- 32			80	21	32
80/ 21- 40					40
80/ 21- 50					50
80/ 21- 63	63				
80/ 21- 80	80				
80/ 21- 100	100				
80/ 21- 125	100	21	125		
100/ 21- 32			100	21	32
100/ 21- 40					40
100/ 21- 50					50
100/ 21- 63					63
100/ 21- 80					80
100/ 21- 100	100				
100/ 21- 125	125				

Gummiqualität / Rubber quality:
 Härte / Hardness :

CR
 70 Shore A

D/d-H	D	d	H	90 Shore A				d _a
				h _v	f _a	F (daN)		
16/ 6,5- 12	16	6,5	12	11,5	2	155	~20	
16/ 6,5- 16			16	14,5	3	150		
16/ 6,5- 20			20	18	4	147		
16/ 6,5- 25			25	22,5	5	145		
20/ 8,5- 16	20	8,5	16	14,5	3	231	~27	
20/ 8,5- 20			20	18	4	226		
20/ 8,5- 25			25	22,5	5	224		
20/ 8,5- 32			32	28,5	6	222		
25/ 10,5- 20	25	10,5	20	18	4	390	~32	
25/ 10,5- 25			25	22,5	5	383		
25/ 10,5- 32			32	28,5	6	379		
25/ 10,5- 40			40	36	8	375		
32/ 13,5- 32	32	13,5	32	28,5	6	584	~39	
32/ 13,5- 40			40	36	8	574		
32/ 13,5- 50			50	45	10	569		
32/ 13,5- 63			63	56	12	564		
40/ 13,5- 32	40	13,5	32	28,5	6	1 001	~49	
40/ 13,5- 40			40	36	8	981		
40/ 13,5- 50			50	45	10	976		
40/ 13,5- 63			63	56	12	971		
40/ 13,5- 80	50	17	80	72	16	966	~62	
50/ 17- 32			32	28,5	6	1 570		
50/ 17- 40			40	36	8	1 545		
50/ 17- 50			50	45	10	1 521		
50/ 17- 63	63	17	63	56	12	1 501	~79	
50/ 17- 80			80	72	16	1 486		
50/ 17- 100			100	90	20	1 472		
63/ 17- 125			125	112	24	2 403		
80/ 21- 32	80	21	32	28,5	6	4 876	~102	
80/ 21- 40			40	36	8	4 571		
80/ 21- 50			50	45	10	4 434		
80/ 21- 63			63	56	12	4 258		
80/ 21- 80	100	21	80	72	16	4 120	~125	
80/ 21- 100			100	90	20	4 052		
80/ 21- 125			125	112	24	3 973		
100/ 21- 32			32	28,5	6	7 897		
100/ 21- 40	125	27	40	36	8	7 593	~150	
100/ 21- 50			50	45	10	7 279		
100/ 21- 63			63	56	12	7 004		
100/ 21- 80			80	72	16	6 769		
100/ 21- 100	125	27	100	90	20	6 573	~150	
100/ 21- 125			125	112	24	6 396		
125/ 27- 32			32	28,5	6	12 213		
122/ 27- 40			40	36	8	11 772		
125/ 27- 50	125	27	50	45	10	11 331	~150	
125/ 27- 63			63	56	12	10 938		
125/ 27- 80			80	72	16	10 497		
122/ 27- 100			100	90	20	10 104		
125/ 27- 125	125	27	125	112	24	9 859	~150	
125/ 27- 160			160	144	32	9 663		



- f_v= prestressement
Vorspannung
- h_v= prestressed spring height
Federhöhe bei Vorspannung
- f_a= spring distance
Federweg
- h_n= loaded spring height
Federhöhe bei Belastung
- d_v= the exterior dimension of the loaded spring
Aussendurchmesser bei Belastung



Gummiqualität / Rubber quality:
Härte / Hardness :

PUR
80 .90. 95 Shore

ISO 3302-1 Toleranzen für Gummiformteile
ISO 3302-1 Rubber-Tolerances for mouldings

Nominal dimension		Class M1		Class M2		Class M3		Class M4	
above	up to and including	F	C	F	C	F	C	F	C
		±	±	±	±	±	±	±	±
Tolerance in mm									
0	4,0	0,08	0,10	0,10	0,15	0,25	0,40	0,50	0,50
4,0	6,3	0,10	0,10	0,15	0,20	0,25	0,40	0,50	0,50
6,3	10	0,10	0,15	0,20	0,20	0,30	0,50	0,70	0,70
10	16	0,15	0,20	0,20	0,25	0,40	0,60	0,80	0,80
16	25	0,20	0,20	0,25	0,35	0,50	0,80	1,00	1,00
25	40	0,20	0,25	0,35	0,40	0,60	1,00	1,30	1,30
40	63	0,25	0,35	0,40	0,50	0,80	1,30	1,60	1,60
63	100	0,35	0,40	0,50	0,70	1,00	1,60	2,00	2,00
100	160	0,40	0,50	0,70	0,80	1,30	2,00	2,50	2,50
Tolerance in %									
160	-	0,30	0,40	0,50	0,70	0,80	1,30	1,50	1,50

**ISO 3302-1 Toleranzen für extrudierte
 Profilquerschnitte**

**ISO 3302-1 Tolerances on cross-sectional
 dimensions of unsupported extrusions**

Nominal dimension		Class E3
above	up to and including	Tolerance ±
0	1,5	0,40
1,5	2,5	0,50
2,5	4,0	0,70
4,0	6,3	0,80
6,3	10	1,00
10	16	1,30
16	25	1,60
25	40	2,00
40	63	2,50
63	100	3,20

**ISO 3302-1 Längentoleranz für extrudierte
 Profile**

**ISO 3302-1 Tolerances on cut length of
 extrusions**

Nominal length		Class L3
above	up to and including	Tolerance in mm
0	40	±1,6
40	63	±2,0
63	100	±2,5
100	160	±3,2
160	250	±4,0
250	400	±5,0
400	630	±6,3
630	1000	±10,0
1000	1600	±12,5
1600	2500	±16,0
2500	4000	±20,0
		Tolerance in %
4000		±0,50

**Umrechnung für Schläuche
 Conversion table for hoses**

mm	inch
10	3/8
13	1/2
16	5/8
19	3/4
25	1

Für Gummiformteile sind die Toleranzen nach ISO 3302-1 M3 gültig.

Wichtige Information:

Durch Produktions- und Härte-toleranzen sind bei Belastungswerten Abweichungen von ca. ±20% möglich.

The tolerances of moulded products are basically by ISO 3302-1 M3, otherwise is shown at the catalogue.

Important notice!

The static load data may have a tolerance of ±20% (due to manufacturing or Sh° hardness differences)

