

## Product range 6 Hydraulic Tubes and SAE-Flanges



Article Category 60 – Hydraulic Tubes

# PR

## Hydraulic Tubes, seamless acc. to DIN 2391

Material: St 37.4 acc. to DIN 1630; NBK; Surface treatment: phosphated and oiled (inside diameters < 6 mm: only oiled)

Pressure I = Calculation pressure I; Pressure III = Calculation pressure III

Artikelgruppe 6003 – 6007,  
6009 – 6017



Designation	Calculated Pressure		Tube OD	Wall thickness	Tube ID
	I (bar)	III (bar)			
PR 04-0,5	313	274	4	0,5	3
PR 04-0,75	409	393	4	0,75	2,5
PR 05-0,75	376	–	5	0,75	3,5
PR 06-0,75	333	289	6	0,75	4,5
PR 04-1	522	502	4	1	2
PR 05-1	432	416	5	1	3
PR 06-1	389	374	6	1	4
PR 08-1	333	289	8	1	6
PR 10-1	282	249	10	1	8
PR 12-1	235	210	12	1	10
PR 14-1	201	182	14	1	12
PR 15-1	188	171	15	1	13
PR 16-1	176	160	16	1	14
PR 18-1	157	143	18	1	16
PR 22-1	128	118	22	1	20
PR 06-1,5	549	528	6	1,5	3
PR 08-1,5	431	414	8	1,5	5
PR 10-1,5	373	358	10	1,5	7
PR 12-1,5	353	305	12	1,5	9
PR 14-1,5	302	265	14	1,5	11
PR 15-1,5	282	249	15	1,5	12
PR 16-1,5	264	234	16	1,5	13
PR 18-1,5	235	210	18	1,5	15
PR 20-1,5	212	191	20	1,5	17

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Calculated Pressure I and III: acc. to DIN 2391 Part 1

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Artikelgruppe 6003 – 6007,  
6009 – 6017



Designation	Calculated Pressure		Tube OD	Wall thickness	Tube ID
	I (bar)	III (bar)			

<--					
PR 22-1,5	192	174	22	1,5	19
PR 28-1,5	151	139	28	1,5	25
PR 06-2	692	665	6	2	2
PR 08-2	549	528	8	2	4
PR 10-2	478	460	10	2	6
PR 12-2	409	393	12	2	8
PR 14-2	403	343	14	2	10
PR 15-2	376	323	15	2	11
PR 16-2	353	305	16	2	12
PR 18-2	313	274	18	2	14
PR 20-2	282	249	20	2	16
PR 22-2	256	228	22	2	18
PR 25-2	226	202	25	2	21
PR 28-2	201	182	28	2	24
PR 30-2	188	171	30	2	26
PR 35-2	161	147	35	2	31
PR 42-2	134	124	42	2	38
PR 08-2,5	658	632	8	2,5	3
PR 10-2,5	576	553	10	2,5	5
PR 12-2,5	495	476	12	2,5	7
PR 14-2,5	434	417	14	2,5	9
PR 15-2,5	409	393	15	2,5	10
PR 16-2,5	386	372	16	2,5	11
PR 18-2,5	392	335	18	2,5	13
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Calculated Pressure I and III: acc. to DIN 2391 Part 1

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Pressure I = Calculation pressure I; Pressure III = Calculation pressure III

Artikelgruppe 6003 – 6007,  
6009 – 6017



Designation	Calculated Pressure		Tube OD	Wall thickness	Tube ID
	I (bar)	III (bar)			
<--					
PR 20-2,5	353	305	20	2,5	15
PR 22-2,5	320	280	22	2,5	17
PR 25-2,5	282	249	25	2,5	20
PR 28-2,5	252	224	28	2,5	23
PR 30-2,5	235	210	30	2,5	25
PR 35-2,5	201	182	35	2,5	30
PR 38-2,5	186	168	38	2,5	33
PR 10-3	666	641	10	3	4
PR 12-3	576	553	12	3	6
PR 14-3	507	487	14	3	8
PR 15-3	478	460	15	3	9
PR 16-3	452	435	16	3	10
PR 18-3	409	393	18	3	12
PR 20-3	373	358	20	3	14
PR 22-3	385	329	22	3	16
PR 25-3	338	294	25	3	19
PR 28-3	302	265	28	3	22
PR 30-3	282	249	30	2	24
PR 35-3	242	216	35	3	29
PR 38-3	223	200	38	3	32
PR 42-3	201	182	42	3	36
PR 14-3,5	576	553	14	3,5	7
PR 20-3,5	426	410	20	3,5	13
PR 25-3,5	349	-	25	3,5	18
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Calculated Pressure I and III: acc. to DIN 2391 Part 1

# PR

## Hydraulic Tubes, seamless acc. to DIN 2391

Material: St 37.4 acc. to DIN 1630; NBK; Surface treatment: phosphated and oiled (inside diameters < 6 mm: only oiled)

Pressure I = Calculation pressure I; Pressure III = Calculation pressure III

Artikelgruppe 6003 – 6007,  
6009 – 6017



Designation	Calculated Pressure		Tube OD	Wall thickness	Tube ID
	I (bar)	III (bar)			
<--					
PR 20-4	478	460	20	4	12
PR 25-4	394	379	25	4	17
PR 28-4	403	343	28	4	20
PR 30-4	376	323	30	4	22
PR 35-4	322	281	35	4	27
PR 38-4	297	261	38	4	30
PR 42-4	269	238	42	4	34
PR 25-4,5	437	420	25	4,5	16
PR 25-5	478	460	25	5	15
PR 28-5	434	417	28	5	18
PR 30-5	409	393	30	5	20
PR 35-5	403	343	35	5	25
PR 38-5	371	319	38	5	28
PR 38-6	390	375	38	6	26
PR 50-6	338	-	50	6	38
PR 38-7	446	429	38	7	24
PR 65-8	347	-	65	8	49
PR 80-10	353	-	80	10	60

Calculated Pressure I and III: acc. to DIN 2391 Part 1

# PR-Zoll

## Hydraulic Tubes, seamless acc. to DIN 2391

Material: St 37.4 acc. to DIN 1630; NBK; Surface treatment: phosphated and oiled (inside diameters < 6 mm: only oiled); Pressure I = Calculation pressure I; Pressure III = Calculation pressure III

Artikelgruppe 6018



<i>Designation</i>	<i>Calculated Pressure</i>		<i>Tube OD</i>	<i>Wall thickness</i>	<i>Tube ID</i>
	<i>I (bar)</i>	<i>III (bar)</i>			
PR 13	415	399	13,25	2,25	8,75
PR 17	403	388	16,75	2,75	11,25
PR 21	379	365	21,25	3,25	14,75
PR 27	343	297	26,75	3,25	20,25
PR 33	341	296	33,5	4,05	25,4

*Calculated Pressure I and III: acc. to DIN 2391 Part 1*

# RB

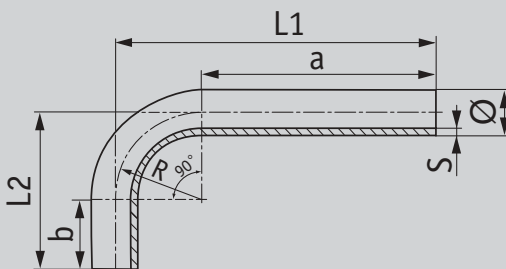
## Tube Bend 90°

Low losses

Surface: phosphated and oiled

Material: St. 35.4/St. 37.4

Artikelgruppe 6020



Designation	Ø	S	ID	Bend radius		L1	L2	
				R	a			
RB 14-1,5	14	1,5	11	30	200	40	230	70
RB 15-1,5	15	1,5	12	30	200	40	230	70
RB 15-2	15	2	11	30	200	40	230	70
RB 16-2	16	2	12	30	200	40	230	70
RB 18-1,5	18	1,5	15	36	200	35	236	71
RB 18-2	18	2	14	36	200	35	236	72
RB 20-2	20	2	16	36	200	45	236	81
RB 20-2,5	20	2,5	15	36	200	45	236	81
RB 20-3	20	3	14	36	200	45	236	81
RB 22-1,5	22	1,5	19	38	200	40	238	78
RB 22-2	22	2	18	38	200	40	238	78
RB 22-3,5	22	3,5	15	38	200	40	238	78
RB 25-2	25	2	21	44	200	50	244	94
RB 25-2,5	25	2,5	20	44	200	50	244	94
RB 25-3	25	3	19	44	200	50	244	94
RB 25-4	25	4	17	44	200	50	244	94
RB 28-1,5	28	1,5	25	48	200	50	248	98
RB 28-2	28	2	24	48	200	50	248	98
RB 28-3	28	3	22	48	200	50	248	98
RB 30-2,5	30	2,5	25	50	200	60	250	110
RB 30-3	30	3	24	50	200	60	250	110
RB 30-4	30	4	22	50	200	60	250	110
RB 35-2	35	2	31	60	200	65	260	125
RB 35-3	35	3	29	60	200	65	260	125

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Calculated Pressure I and III: acc. to DIN 2391 Part 1

# RB

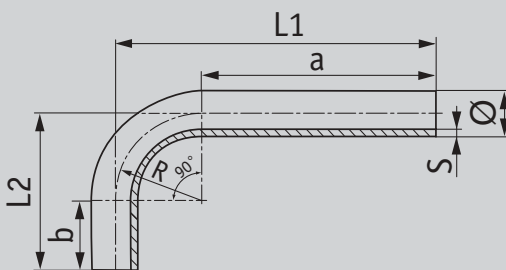
## Tube Bend 90°

Low losses

Surface: phosphated and oiled

Material: St. 35.4/St. 37.4

Artikelgruppe 6020



Designation	Ø	S	ID	Bend radius R	a	b	L1	L2
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RB 38-2,5	38	2,5	33	65	200	75	265	140
RB 38-3	38	3	32	65	200	75	265	140
RB 38-4	38	4	30	65	200	75	265	140
RB 38-5	38	5	28	65	200	75	265	140
RB 42-2	42	2	38	80	200	85	280	165
RB 42-3	42	3	36	80	200	85	280	165
RB 50-6	50	6	38	210	100	100	310	310
RB 65-8	65	8	49	210	110	110	320	320
RB 80-10	80	10	60	210	120	120	330	330



# B

## Tube Bending Tools

B = Tube Bender

A = Tube cutting jig

M = in a metallic suit

Artikelgruppe 5999

### Designation

BAV 06-12	Biege- und Absägemaschine	6 – 18 Tube Ø
BV 06-18	Biegevorrichtung	6 – 18 Tube Ø
BV 06-18 M	Biegevorrichtung im Metallkoffer	6 – 18 Tube Ø
BV 20-25	Biegevorrichtung im Metallkoffer	20 – 25 Tube Ø

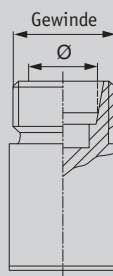
Calculated Pressure I and III: acc. to DIN 2391 Part 1

# VOM

## VPre-assembly Tools, hardened

for hand-assembly

Artikelgruppe 5289



*Designation*

*Series*

*Thread*

*Ø*

VOM NW 04 HL	L	M 12x1,5	6
VOM NW 06 HL	L	M 14x1,5	8
VOM NW 08 HL	L	M 16x1,5	10
VOM NW 10 HL	L	M 18x1,5	12
VOM NW 13 HL	L	M 22x1,5	15
VOM NW 16 HL	L	M 26x1,5	18
VOM NW 20 HL	L	M 30x2	22
VOM NW 25 HL	L	M 36x2	28
VOM NW 32 HL	L	M 45x2	35
VOM NW 40 HL	L	M 52x2	42
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VOM NW 03 HS	S	M 14x1,5	6
VOM NW 04 HS	S	M 16x1,5	8
VOM NW 06 HS	S	M 18x1,5	10
VOM NW 08 HS	S	M 20x1,5	12
VOM NW 10 HS	S	M 22x1,5	14
VOM NW 13 HS	S	M 24x1,5	16
VOM NW 16 HS	S	M 30x2	20
VOM NW 20 HS	S	M 36x2	25
VOM NW 25 HS	S	M 42x2	30
VOM NW 32 HS	S	M 52x2	38

**Construction Series:** LL = Very Light – L = Light – S = Heavy — Ø = Tube Outside Diameter — PN = Nominal Pressure — PB = Maximal Working Pressure

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