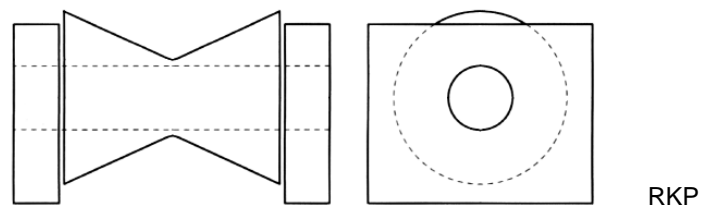
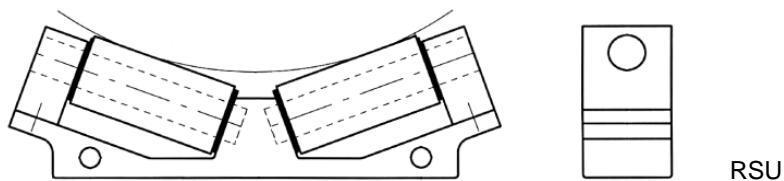
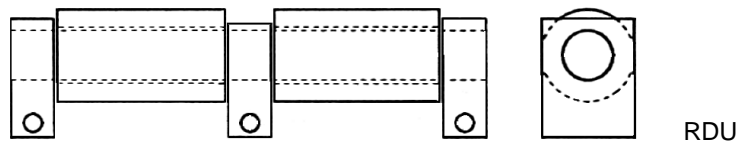
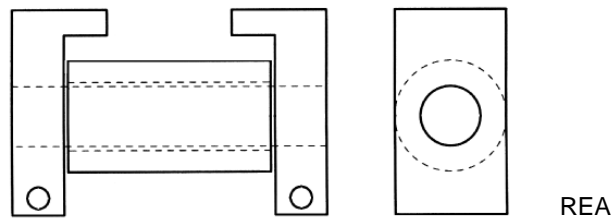
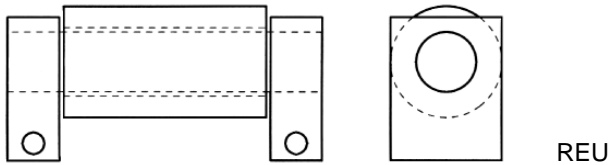


ROLLER SUPPORT



Bernecker have used specialist design software to design overall dimensions and optimize material on the basis of our knowledge of media, design temperatures, pipe weight, insulation and support spacing.

Overall heights of 100, 150, 200 and 300 mm BOP (bottom of pipe) have been matched to correspond insulation thickness. For the different temperatures are selected RSt 37-2 (up to 300°C) and 13CrMo4-5 (up to 560°C), but other materials grades can be supported, e.g. 15Mo3, 1.4571.

The pipe supports in Berneckers MODULAR SYSTEM can also be used as sliding supports, pipe guides and as anchors. The loads given in the tables have been calculated for:

150°C operating temperature (RSt 37-2)
450°C operating temperature (13CrMo4-5)

You will find conversion factors for other temperatures and materials on page 3.6.1.26.

Our pipe supports can also be used in conjunction with roller supports or low-friction sliding supports with PTFE liners. When using PTFE sliding supports a VA sliding plate is fitted beneath the base of the pipe support.

The range also includes guides and lift-off restraints that can be assembled economically as *Clamp Systems*. You will find further particulars in the chapter *Clamp Systems*.

Bernecker has been supplying pipe fixings to all sectors of industry for over 30 years.

Sophisticated production techniques, a modern fleet of machinery, a highly skilled workforce and a well-established quality management system have all contributed to achieve our high current levels of quality.

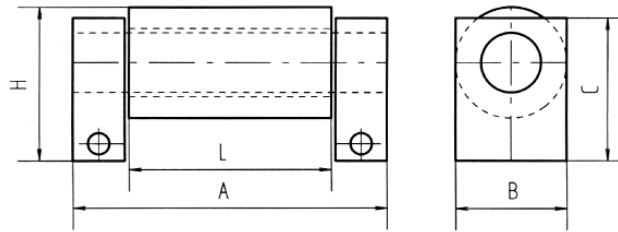
The MODULAR SYSTEM offers users of pipe fixings a range of substantial benefits of both a technical and commercial nature.

We can also supply special pipe support equipment for applications requiring special solutions, either as modifications to existing products using different materials, as non-standard sizes or as custom fabrications.

Our user-friendly product literature provides easy reference tables that give all the details needed about loads, weights and dimensions.

Our comprehensive stocks of components and finished parts enable us to maintain high levels of service and supply.

**Roller Support
Type REU
without guiding**

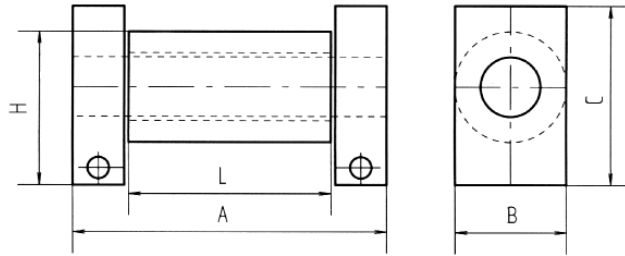


Roller Support - type REU without guiding

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	without guiding
Surface	steel parts hot-dip galvanized -V

Type	L	A	H	B	C	Can be used with beam clamps part 5		Support load kN	Weight kg
						Ja	Nej		
REU-080/15	80	146	65	60	60	x		15	3,0
REU-100/15	100	166	65	60	60	x		15	3,2
REU-120/15	120	186	65	60	60	x		15	3,5
REU-140/15	140	206	65	60	60	x		15	3,7
REU-080/25	80	146	80	70	75	x		25	5,0
REU-100/25	100	166	80	70	75	x		25	5,4
REU-120/25	120	186	80	70	75	x		25	5,8
REU-140/25	140	206	80	70	75	x		25	6,3
REU-080/50	80	146	100	100	95	x		50	9,2
REU-100/50	100	166	100	100	95	x		50	10,3
REU-120/50	120	186	100	100	95	x		50	11,1
REU-140/50	140	206	100	100	95	x		50	11,9
REU-200/100	200	266	125	130	110		x	100	23,8

**Roller Support
Type REF
with guide**

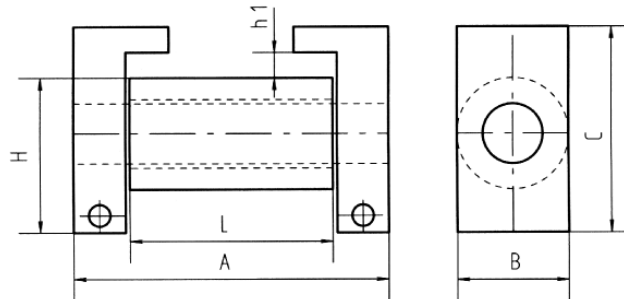


Roller Support - type REF med sidestyr

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	with guide
Surface	steel parts hot-dip galvanized -V

Type	L	A	H	B	C	Can be used with beam clamps part 5		Support load kN	Weight kg
						Ja	Nej		
REF-080/15	80	146	65	60	85	x		15	3,8
REF-100/15	100	166	65	60	85	x		15	4,0
REF-120/15	120	186	65	60	85	x		15	4,3
REF-140/15	140	206	65	60	85	x		15	4,5
REF-080/25	80	146	80	70	100	x		25	6,0
REF-100/25	100	166	80	70	100	x		25	6,3
REF-120/25	120	186	80	70	100	x		25	6,7
REF-140/25	140	206	80	70	100	x		25	7,1
REF-080/50	80	146	100	100	125	x		50	10,6
REF-100/50	100	166	100	100	125	x		50	11,7
REF-120/50	120	186	100	100	125	x		50	12,5
REF-140/50	140	206	100	100	125	x		50	13,4
REF-200/100	200	266	125	130	160		x	100	27,0

**Roller Support
Type REA
with protection against unintended removal**

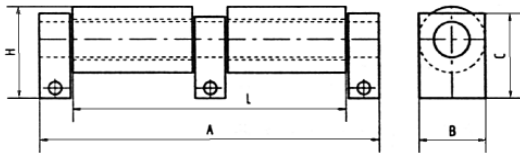


Roller Support - type REA with protection against unintended removal (=20% of Fz)

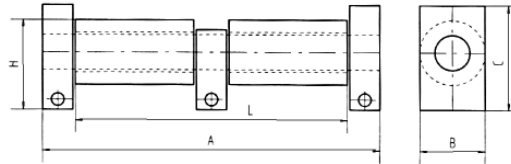
Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	with protection against unintended removal (=20% of Fz)
Surface	steel parts hot-dip galvanized -V

Type	L	A	H	h1	B	C	Can be used with beam clamps part 5		Support load kN	Weight kg
							Ja	Nej		
REA-080/15	80	146	65	17	60	92	x		15	4,1
REA-100/15	100	166	65	17	60	92	x		15	4,6
REA-120/15	120	186	65	17	60	92	x		15	4,6
REA-140/15	140	206	65	17	60	92	x		15	4,8
REA-080/25	80	146	80	17	70	107	x		25	6,3
REA-100/25	100	166	80	17	70	107	x		25	6,6
REA-120/25	120	186	80	17	70	107	x		25	7,0
REA-140/25	140	206	80	17	70	107	x		25	7,4
REA-080/50	80	146	100	17	100	132	x		50	11,0
REA-100/50	100	166	100	17	100	132	x		50	12,1
REA-120/50	120	186	100	17	100	132	x		50	12,9
REA-140/50	140	206	100	17	100	132	x		50	13,8
REA-200/100	200	266	125	23	130	167		x	100	27,6

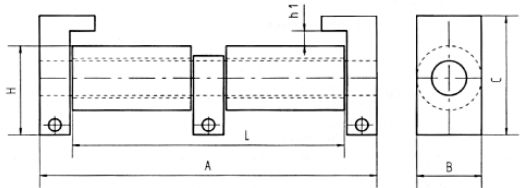
Roller Support
Type RDU without guide
Type RDF with guide
Type RDA with protection against unintended removal



Type RDU without guide



Type RDF with guide



Type RDA with protection against unintended removal

Roller Support

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	RDU without guide - RDF with guide - RDA with protection against unintended removal (=20% of Fz)
Surface	steel parts hot-dip galvanized -V

Type RDU without guide

Type	L	A	H	B	C	Can be used with beam clamps part 5		Support load kN	Weight kg
						Yes	No		
RDU-240/25-F	240	305	80	70	75	x		25	8,4
RDU-320/25-F	320	385	80	70	75	x		25	10,0
RDU-240/50-F	240	305	80	100	95	x		50	16,7
RDU-320/50-F	320	385	80	100	95	x		50	20,0

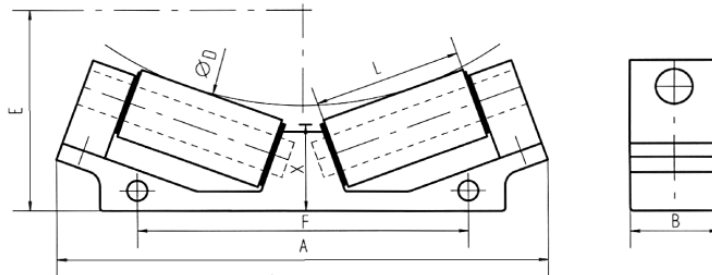
Type RDF with guide

RDF-240/25-F	240	305	80	70	100	x		25	9,2
RDF-320/25-F	320	385	80	70	100	x		25	10,8
RDF-240/50-F	240	305	100	100	125	x		50	17,2
RDF-320/50-F	320	385	100	100	125	x		50	21,4

Type RDA with protection against unintended removal

Type	L	A	H	h1	B	C	Can be used with beam clamps part 5		Support load kN	Weight kg
							Yes	No		
RDA-240/25-F	240	305	80	17	70	107	x		25	9,5
RDA-320/25-F	320	385	80	17	70	107	x		25	11,1
RDA-240/50-F	240	305	100	17	100	132	x		50	17,6
RDA-320/50-F	320	385	100	17	100	132	x		50	21,8

**Dual Cylinder Roller Support
Type RSU**



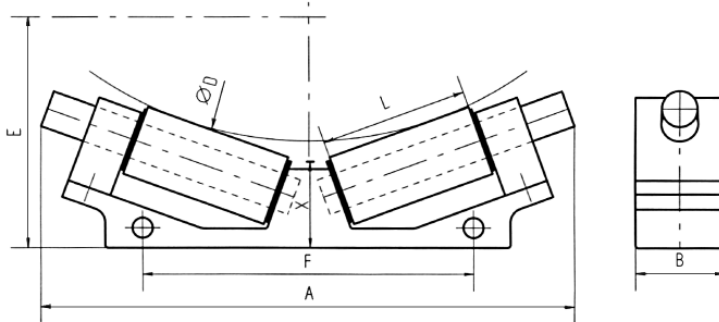
Dual Cylinder Roller Support - type RSU

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	dual cylinder
Surface	steel parts hot-dip galvanized -V

Type	A	B	L	X	Pipediameter ØD	Can be used with beam clamps part 5		Support load kN	Weight kg
						Yes	No		
RSU-025	360	60	100	56	140 - 508	x		25	12,0
RSU-045	400	70	120	70	273 - 812	x		45	18,0
RSU-080	510	100	140	105	324 - 914	x		80	44,0
RSU-120	580	130	200	138	356 - 1220		x	120	90,0
RSU-008	270	50	60	42	220 - 400	x		8	4,1
RSU-015	240	50	50	46	200 - 380	x		15	4,5
RSU-026	350	60	100	58	260 - 700	x		26	8,5
RSU-050	474	70	136	68	324 - 960	x		50	21,0
RSU-100	585	100	140	83	575 - 1230	x		100	70,0

Support loads are for average diameters and evenly distributed loads.
Can take lateral forces up to 35% of support load.
 $E = 1,064 \times R + X$

**Roller Support
Type RSA with protection against
unintended removal
Protection against unintended removal
for dual cylinder roller support**



Dual Cylinder Roller Supports - type RSA with protection against unintended removal

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	dual cylinder roller support with protection against unintended removal
Surface	steel parts hot-dip galvanized -V

Type	A	B	L	X	Pipediameter ØD	Can be used with beam clamps part 5		Support load kN	Weight kg
						Yes	No		
RSA-025	360	60	100	56	140 - 508	x		25	12,2
RSA-045	400	70	120	70	273 - 812	x		45	18,5
RSA-080	510	100	140	105	324 - 914	x		80	44,8
RSA-120	580	130	200	138	356 - 1220		x	120	91,3
RSA-008	270	50	60	42	220 - 400	x		8	4,2
RSA-015	240	50	50	46	200 - 380	x		15	4,7
RSA-026	350	60	100	58	260 - 700	x		26	8,7
RSA-050	474	70	136	68	324 - 960	x		50	21,5
RSA-100	585	100	140	83	575 - 1230	x		100	71,3

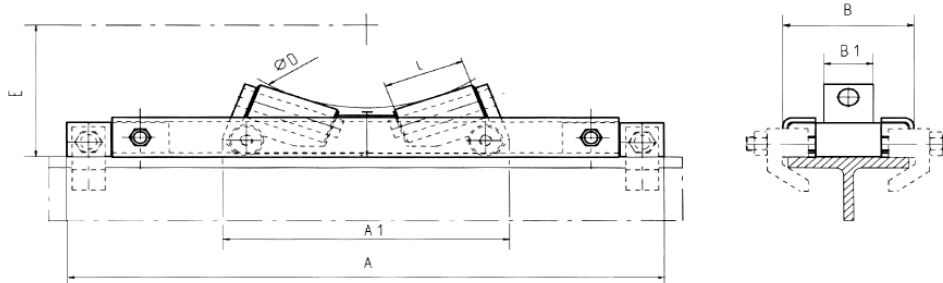
Protection against unintended removal for dual cylinder roller support - type RSA

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze
Type	dual cylinder roller support with protection against unintended removal
Surface	steel parts hot-dip galvanized -V

Type	For roller support type	Bolts size on insulating saddle	Weight kg
AH-RSA008	RSA 008	M10	1,0
AH-RSA015	RSA 015	M10	1,5
AH-RSA025	RSA 025 / RSA 026	M10	2,7
AH-RSA045	RSA 045 / RSA 050	M12	5,4
AH-RSA080	RSA 080	M20	7,4
AH-RSA100	RSA 100 / RSA 120	M30	13,6

E=1,064 x R + X
Restrain against lift-off are 15% of Fz.
Support loads are average diameters and evenly distributed loads.

**Dual Cylinder Roller Support
Type RSU/V with lateral movement**



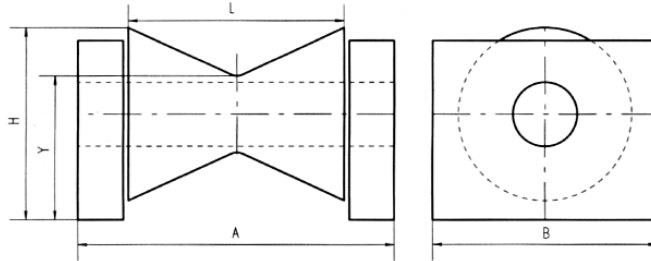
Dual Cylinder Roller Support - type RSU/V with lateral movement

Material	roller: S235 , axle: 1.4571 , cheeks: S235JRG2 , bearing bush: bronze frame and carriage: S235JRG2
Type	dual cylinder roller support with lateral movement
Surface	steel parts hot-dip galvanizedf -V

Type	Lateral movement	A	B	A1	B1	L	X	Pipe diameter ØD	Beam clamp	Support load kN	Weight kg
RSU-015/V100	100	628									26,0
RSU-015/V200	200	728	150	250	50	50	46	220 - 380	M16	15	29,0
RSU-015/V300	300	828									32,0
RSU-026/V100	100	728									34,0
RSU-026/V200	200	828	160	350	60	100	53	260 - 700	M20	26	37,0
RSU-026/V300	300	928									40,0
RSU-050/V100	100	792									53,0
RSU-050/V200	200	892	170	414	70	136	68	324 - 960	M20	50	57,0
RSU-050/V300	300	992									61,0
RSU-100/V100	100	907									86,0
RSU-100/V200	200	1007	197	529	100	140	83	575 - 1230	M20	100	90,0
RSU-100/V300	300	1107									94,0

Supports load for average diameters and evenly distributed loads.
Can take lateral forces up to 35% of support loads.
 $E = 1,064 \times R + X$

Roller Support
Type RKP with polyamide taper roll
Type RKS with steel taper roll



Roller Support - type RKP with polyamide taper roller

Material	roller: polyamide , axle: 1.4571 , cheeks: S235JRG2
Type	
Surface	steel parts hot-dip galvanized -V

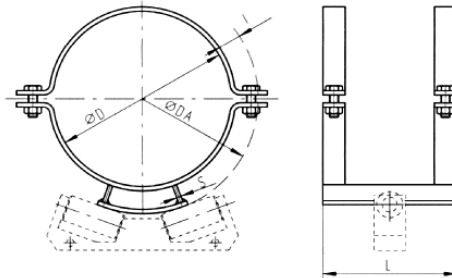
Type	L	A	H	Y	Pipediameter ØD	Support load kN	Weight kg
RKP-004	120	186	90	70	115-273	4	3,0
RKP-008	140	206	100	75	220-324	8	5,0
RKP-015	200	266	135	100	273-458	15	8,0

Roller Support - type RKS with steel taper roller

Material	roller: polyamide , axle: 1.4571 , cheeks: S235JRG2
Type	
Surface	steel parts hot-dip galvanized -V

Type	L	A	H	Y	Pipediameter ØD	Support load kN	Weight kg
RKS-004	120	186	90	70	115-273	8	6,2
RKS-008	140	206	100	75	220-324	16	8,0
RKS-015	200	266	135	100	273-458	35	15,0

Pipe Saddle with Pipe Clamps
Type ISRU
DN 50 - DN 200

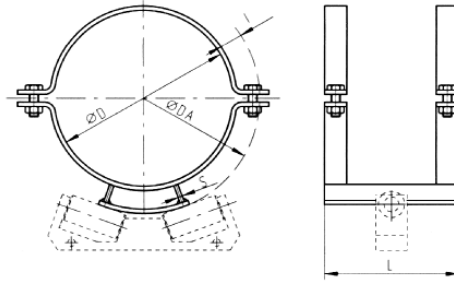


Pipe Saddle with Pipe Clamp - type ISRU DN 50 - DN 200

Material	S235JRG2
Type	
Surface	hot-dip galvanized -V

Type	Pipe diameter mm	Insulation thickness mm	DA \varnothing mm	L mm	S mm	Fz kN	Weight kg
ISRU-061/030	60,3	30	120	300	5	1,5	2,9
ISRU-061/050		50	160				3,4
ISRU-061/080		80	220				4,6
ISRU-061/100		100	260				5,2
ISRU-061/120		120	300				5,9
ISRU-077/030	76,1	30	140	300	5	1,5	3,2
ISRU-077/050		50	180				3,7
ISRU-077/080		80	240				4,9
ISRU-077/100		100	280				5,7
ISRU-077/120		120	320				6,4
ISRU-089/030	88,9	30	150	300	5	1,5	3,4
ISRU-089/050		50	190				4,0
ISRU-089/080		80	250				5,0
ISRU-089/100		100	290				5,8
ISRU-089/120		120	330				6,5
ISRU-115/030	114,3	30	175	300	5	2,0	5,5
ISRU-115/050		50	215				9,2
ISRU-115/080		80	275				7,3
ISRU-115/100		100	315				8,0
ISRU-115/120		120	355				8,6
ISRU-140/030	139,7	40	220	300	5	4,0	6,3
ISRU-140/050		50	240				6,7
ISRU-140/080		80	300				7,8
ISRU-140/100		100	340				8,4
ISRU-140/120		120	380				9,2
ISRU-169/030	168,3	40	250	300	5	4,0	7,0
ISRU-169/050		50	270				7,9
ISRU-169/080		80	330				9,3
ISRU-169/100		100	370				10,2
ISRU-169/120		120	410				11,2
ISRU-220/030	219,1	40	300	300	6	10,0	9,0
ISRU-220/050		50	320				9,3
ISRU-220/080		80	380				10,6
ISRU-220/100		100	420				11,5
ISRU-220/120		120	460				12,4

Pipe Saddle with Pipe Clamps
Type ISRU
DN 250 - DN 500

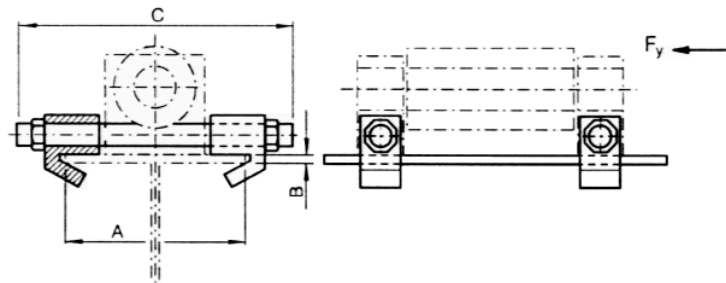


Pipe Saddle with Pipe Clamp - type ISRU DN 250 - DN 500

Material	S235JRG2
Type	
Surface	hot-dip galvanized -V

Type	Pipe diameter mm	Insulation thickness mm	DA ø mm	L mm	S mm	Fz kN	Weight kg
ISRU-273/050	273,0	50	375	300	10	10,0	15,0
ISRU-273/080		80	435				17,2
ISRU-273/100		100	475				18,6
ISRU-273/120		120	515				20,1
ISRU-273/150		150	575				22,3
ISRU-324/050	323,9	50	425	300	12	20,0	18,0
ISRU-324/080		80	485				20,7
ISRU-324/100		100	525				22,4
ISRU-324/120		120	565				24,2
ISRU-324/150		150	625				26,8
ISRU-356/050	355,6	50	455	300	12	20,0	19,6
ISRU-356/080		80	515				22,2
ISRU-356/100		100	555				24,0
ISRU-356/120		120	595				25,7
ISRU-356/150		150	655				28,4
ISRU-407/050	406,4	50	510	300	15	40,0	30,0
ISRU-407/080		80	570				33,3
ISRU-407/100		100	610				35,5
ISRU-407/120		120	650				37,7
ISRU-407/150		150	710				41,0
ISRU-457/050	457,0	50	560	300	15	40,0	32,2
ISRU-457/080		80	620				35,5
ISRU-457/100		100	660				37,7
ISRU-457/120		120	700				39,9
ISRU-457/150		150	760				43,3
ISRU-508/050	508,0	50	608	300	15	40,0	35,9
ISRU-508/080		80	668				39,1
ISRU-508/100		100	708				41,3
ISRU-508/120		120	748				43,4
ISRU-508/150		150	808				46,7

**Beam Clamps for Roller Support
Type PKR**



Beam Clamps for Roller Support - type PKR - M12

Material	clamps: S235JRG2 , threaded parts: St 8
Type	incl. nuts - required preload: M12 - 30 Nm
Surface	hot-dip galvanized -V

Type	Beam dimensions		Thread rod C	Insert for roller support Fz kN	Load kN	Weight kg
	A	B				
PKR-120/12	100 - 120	8-19	180	15	10,0	1,0
PKR-160/12	130 - 160	8-19	220	15 - 25	8,0	1,2
PKR-200/12	170 - 200	8-19	260	15 - 50	6,0	1,4

Beam Clamps for Roller Support - type PKR - M20

Material	clamps: S235JRG2 , threaded parts: St 8
Type	incl. nuts - required preload: M20 - 90 Nm
Surface	hot-dip galvanized -V

Type	Beam dimensions		Thread rod C	Insert for roller support Fz kN	Load kN	Weight kg
	A	B				
PKR-160/20	130 - 160	8-19	260	15 - 25	14,0	6,2
PKR-200/20	170 - 200	8-19	300	15 - 80	12,0	6,4
PKR-240/20	210 - 240	8-19	340	15 - 120	10,0	6,6
PKR-300/20	260 - 300	8-19	400	15 - 120	9,0	6,8

Corrosion protection and surface finishes

The pipe supports can be supplied to your specified surface treatments with the following finishes: Sandblast, oil-treated, primed, varnished pickled, hot-dip galvanized or zinc plated.

Heat treatment

If desired the components of heat resisting material can be heat-treated e.g. stress-free annealing, normalizing or hardening of high temperature materials. On request, a heat treatment certificate is made when the heat treatment has been carried out.

Prefabrication service

All the components are available as desired ready for installation with a complete specification. The prefabricated components can be installed at once and make an easy and timesaving assembly.

Expert advice

As we are very experienced in pipeline accessories we are able to help with the settlement of large orders and we are at your service for professional advice.

Loads

The loads given in the catalogue have been calculated according to current engineering regulations and have been verified in tests. They are given as guideline figures only and are not necessarily applicable in specific cases.

Acceptance / Certificates

On request we can supply our pipe support products with acceptance test certificates to EN 10204 3.1B or with factory certificates to EN 10204 2.2.

If necessary the test can be carried out by TÜV or other testing companies.

Security

Bernecker has a quality assurance system that is certified to EN ISO 9002 and a Quality Management Manual. This guaranties that the specifications and requirements are observed.