



Hydraulic Seals

For reliable fluid leakage prevention

Small things make **GREAT** things possible

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About M Seals

Your Global Sealing Solutions Partner.

M Seals is an international company founded in 1963 in Denmark, with offices in Sweden, the UK, Poland, Finland and China. Our many years of experience and knowledge make us a preferred sealing solutions supplier for customers worldwide.

We specialise in the design, manufacture and supply of sealing components and offer a comprehensive range of products tailored to different applications and industries. Our products range from standard seals, with thousands in stock for next day delivery, to customised solutions that meet specific requirements and special environmental conditions.

In 2007, M Seals became a part of Diploma PLC, giving us access to extensive resources and support. This affiliation allows us to offer expert advice, innovative solutions, and high-quality service, benefiting from shared knowledge and best practices within the group. This ensures we stay at the forefront of industry developments and deliver exceptional value to our customers.

Knowledge

We have developed extensive knowledge of seals and their applications, including their composition, lifetime and suitability for a specific job. The right choice of seal minimises the risk of unexpected breakdowns, so our team can advise on the best solution to save you from potential future issues.

We can make recommendations from our wide range of stocked seals or work with your specific requirements to design a bespoke sealing solution. Our team use their technical knowledge and experience to provide the best service to our customers.

Quality Assurance

We ensure high-quality sealing products through careful control and evaluation, and we are proud to have achieved several ISO certifications, including ISO9001:2015, ISO14001:2015, ISO45001:2018 and AS EN 9120:2018.

We also conform to many industry specific regulations, ensuring our sealing products comply to specific requirements and full traceability is maintained throughout the product lifecycle.



Introduction to Hydraulic Seals

Hydraulic seals are designed to seal areas between the components inside a hydraulic cylinder. A hydraulic cylinder contains many different components, some of which are exposed to high pressure, high temperature and fluids. Hydraulic seals are designed to fit the specific components in a hydraulic cylinder while creating a leakproof seal around them.

STATIC HYDRAULIC SEALS

Static seals are used in applications where they remain stationary. Static hydraulic seals are not exposed to movement, but they are able to withstand high pressure.

DYNAMIC HYDRAULIC SEALS

Dynamic seals are exposed to movement. For example, rod seals, which are used to seal moving piston rods.



OVERVIEW OF HYDRAULIC SEAL TYPES



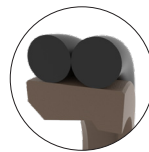
PISTON SEALS

Piston seals prevent fluid or other media bypassing the piston as the system pressure pushes the piston down the cylinder during a pressure cycle. They can be single-acting or double-acting seals.



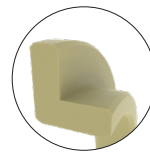
ROD SEALS

Rod seals help prevent pressurised hydraulic fluid within the cylinder from leaking, as well as keeping dirt and contaminants out of the cylinder, which extends the lifespan of the cylinder.



WIPER SEALS

Wiper seals (also called scraper seals) are generally used together with other sealing components, such as a rod seal. Their function is to scrape off dirt from the rod and prevent dirt entering the cylinder.



WEAR RINGS

Wear rings (also called guide-rings) are used to keep the piston centralised. Wear rings are used together with rod and piston seals to ensure even wear and stress on the seals.

BESPOKE ENGINEERED HYDRAULIC SEALS

In applications where standard seals are not suitable, we can design and manufacture customised sealing solutions for static and dynamic applications. We are able to respond quickly to unique sealing challenges, as we have over 240 different engineered material grades in stock and run 24-hour manufacturing operations. All of our seals meet rigorous quality standards, so you can have confidence in our high performance, reliable sealing products.



Rod & Piston Seals - Single Acting

M SEALS PART NUMBERS

The part names consist of: 1 initial letter + 3 digits + the dimension of the seal.

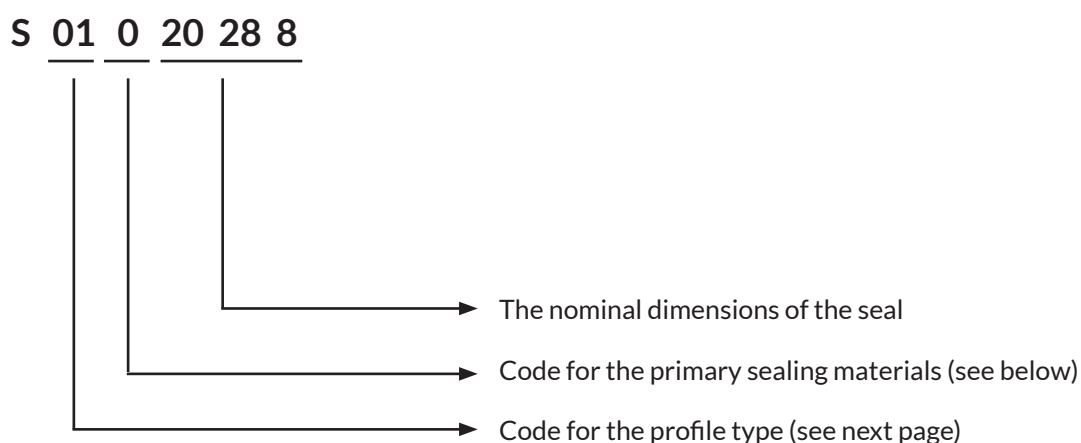
For example: **S 01 0 20 28 8**

The initial letter is the seal type:

E = Piston seal – dynamic sealing externally

I = Rod seal – dynamic sealing internally

S = Piston/Rod seal – dynamic sealing area both externally and internally

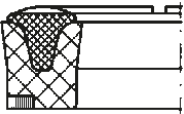
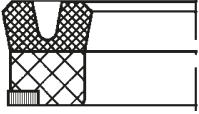
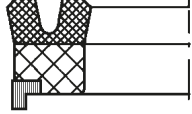
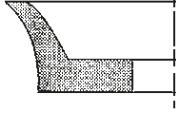
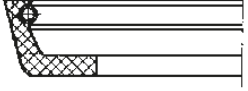
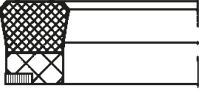
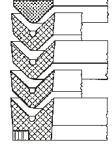


MATERIAL CODES

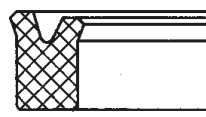
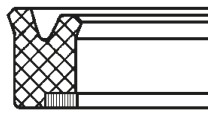
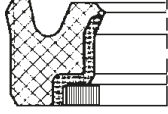
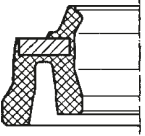
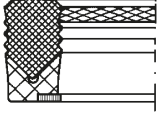
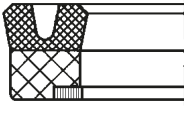
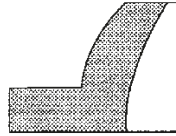
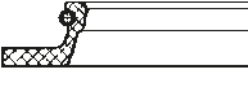
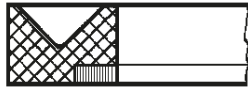
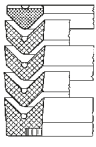
0 = NBR	7 = PA
1 = NBR/FABRIC	8 = FPM/FABRIC
2 = PU	9 = METAL
3 = FPM	A = CSM
4 = EPDM	B = EPDM/FABRIC
5 = PTFE	C = SIL
6 = CR	

Profile Types

E - PISTON SEAL - DYNAMIC SEALING EXTERNALLY

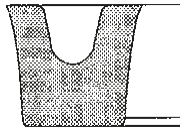
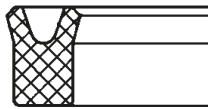
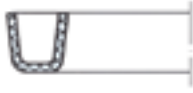
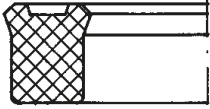
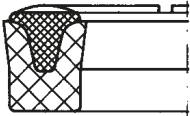
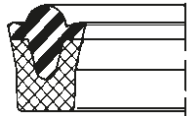
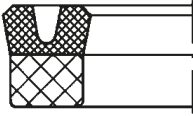
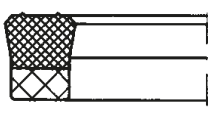
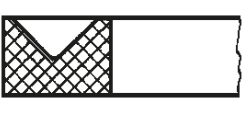
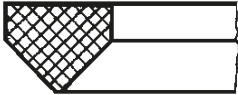
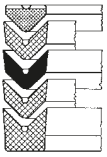
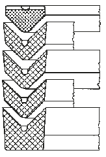
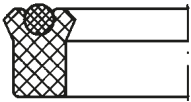
E01 	E02 	E03 	E04 	E12 
E23 	E32 	E33 	E34 	E41 
E42 	E52 	E54 	E61 	E67 

I - ROD SEAL - DYNAMIC SEALING INTERNALLY

I01 	I02 	I03 	I04 	I12 
I15 	I16 	I17 	I18 	I19 
I20 	I21 	I22 	I320 	I41 
I42 	I45 	I52 	I54 	I61 
I67 				

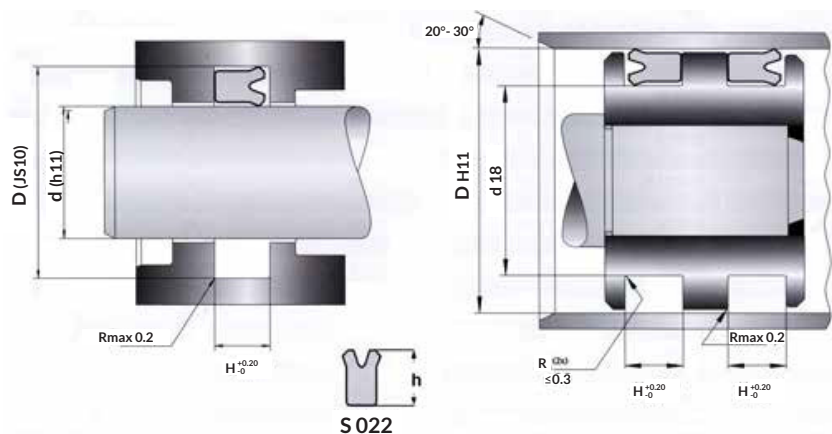
Profile Types

S - PISTON/ROD SEAL - DYNAMIC SEALING AREA BOTH EXTERNALLY & INTERNALLY

S01 	S02 	S03 	S06 	S15 
S21 	S22 	S30 	S50 	S60 
S62 	S63 	S64 	S66 	S70 



Profile S022



WORKING CONDITIONS

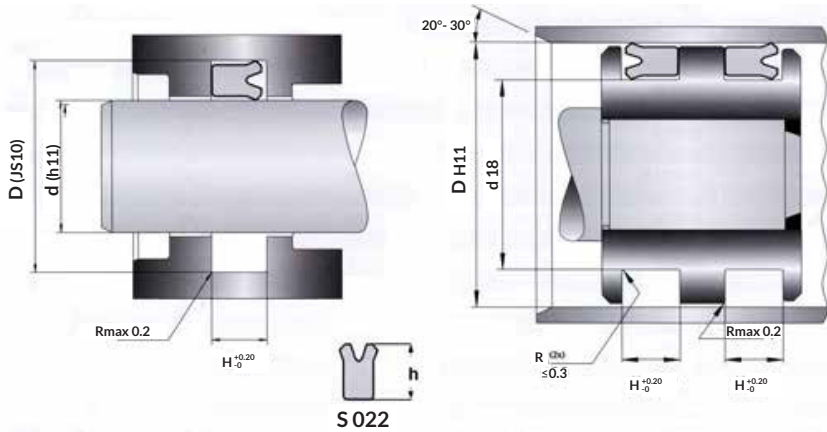
Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA

M SEALS NO.	M SEALS TYPE	d	D	h	H
700009	S022	5.00	12.00	5.00	5.50
700011	S022	5.00	12.00	6.00	6.50
700019	S022	6.00	12.00	4.00	4.50
700021	S022	6.00	12.00	6.00	6.50
700029	S022	6.00	15.00	8.00	9.00
700070	S022	8.00	14.00	6.00	7.00
700047	S022	8.00	15.00	8.00	9.00
701116	S022	8.00	16.00	5.70	6.30
700061	S022	8.00	18.00	9.00	10.00
700075	S022	10.00	16.00	6.00	6.50
700038	S022	10.00	18.00	5.50	6.00
700081	S022	10.00	18.00	6.00	7.00
700083	S022	10.00	18.00	8.00	9.00
700089	S022	10.00	20.00	8.00	9.00
700093	S022	10.00	22.00	8.00	9.00
700040	S022	12.00	18.00	6.00	7.00
700098	S022	12.00	20.00	8.00	9.00
700394	S022	12.00	22.00	5.00	6.00
700163	S022	12.00	22.00	7.50	8.00
700330	S022	12.00	22.00	8.00	9.00
700008	S022	14.00	22.00	6.00	7.00
700334	S022	14.00	24.00	8.00	9.00
700050	S022	15.00	25.00	8.00	9.00
700056	S022	16.00	22.00	4.00	4.50
700336	S022	16.00	26.00	5.00	6.00
700196	S022	16.00	26.00	8.00	9.00
700337	S022	16.00	28.00	6.00	7.00
700339	S022	18.00	25.00	5.00	5.50
700058	S022	18.00	26.00	8.50	9.50
700060	S022	18.00	28.00	8.00	9.00
700340	S022	18.00	30.00	8.00	9.00

Profile S022



WORKING CONDITIONS

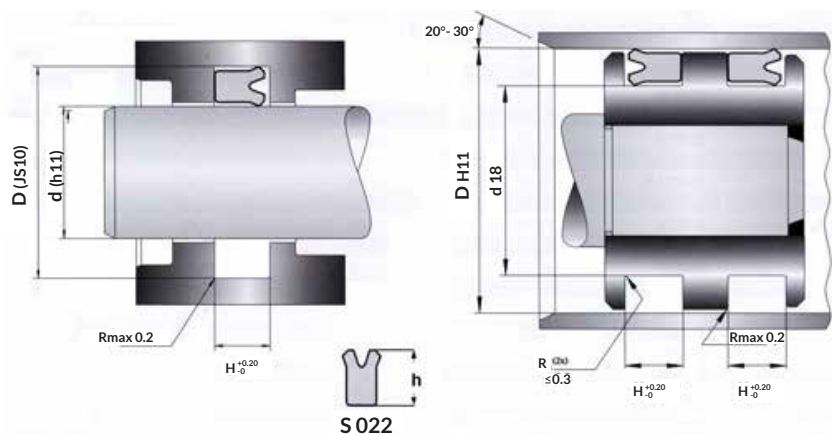
Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA

M SEALS NO.	M SEALS TYPE	d	D	h	H
700066	S022	20.00	28.00	8.00	9.00
700068	S022	20.00	30.00	8.00	9.00
700201	S022	20.00	30.00	10.00	11.00
700161	S022	20.00	32.00	7.50	8.50
700818	S022	20.00	40.00	10.00	11.00
700341	S022	22.00	28.00	8.00	9.00
700342	S022	22.00	30.00	6.00	7.00
701117	S022	22.00	32.00	8.00	9.00
700343	S022	22.00	32.00	8.00	9.00
700300	S022	22.00	35.00	10.00	11.00
700344	S022	24.00	32.00	7.00	8.00
700224	S022	25.00	33.00	5.00	5.50
700189	S022	25.00	35.00	5.00	5.50
700072	S022	25.00	35.00	8.00	9.00
700105	S022	25.00	35.00	10.00	11.00
700346	S022	25.00	38.00	10.00	11.00
700074	S022	25.00	40.00	10.00	11.00
700016	S022	28.00	38.00	8.00	9.00
700076	S022	28.00	40.00	10.00	11.00
700164	S022	30.00	40.00	5.00	5.50
700080	S022	30.00	40.00	10.00	11.00
700082	S022	30.00	42.00	10.00	11.00
700084	S022	30.00	45.00	10.00	11.00
700347	S022	30.00	50.00	10.00	11.00
700168	S022	30.00	50.00	12.00	13.00
700320	S022	32.00	40.00	8.00	9.00
700268	S022	32.00	42.00	10.00	11.00
700088	S022	32.00	45.00	10.00	11.00
700348	S022	34.00	45.00	7.00	8.00
700380	S022	34.00	45.00	9.00	10.00
700328	S022	35.00	45.00	8.00	9.00

Profile S022



WORKING CONDITIONS

Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

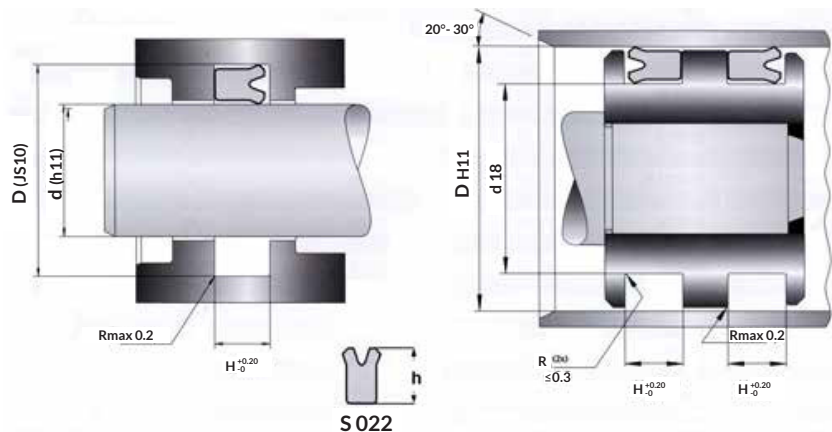
MATERIAL

Polyurethane 91° ShA

M SEALS NO.	M SEALS TYPE	d	D	h	H
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700149	S022	35.00	50.00	10.00	11.00
700350	S022	35.00	55.00	10.00	11.00
700397	S022	36.00	46.00	7.00	8.00
700352	S022	38.00	50.00	9.00	10.00
700018	S022	38.00	55.00	10.00	11.00
700094	S022	40.00	50.00	8.00	9.00
700379	S022	40.00	50.00	10.00	11.00
700116	S022	40.00	55.00	10.00	11.00
700308	S022	40.00	60.00	10.00	11.00
700117	S022	40.00	60.00	13.00	14.00
700156	S022	42.00	52.00	9.00	10.00
700107	S022	45.00	55.00	10.00	11.00
700034	S022	45.00	60.00	10.00	11.00
700354	S022	45.00	63.00	10.00	11.00
700119	S022	45.00	65.00	10.00	11.00
700633	S022	45.00	65.00	12.00	13.00
700120	S022	48.00	58.00	10.00	11.00
700260	S022	50.00	60.00	6.00	7.00
700104	S022	50.00	60.00	10.00	11.00
700046	S022	50.00	62.00	9.00	10.00
701094	S022	50.00	63.00	6.00	7.00
700010	S022	50.00	65.00	10.00	11.00
700122	S022	50.00	70.00	10.00	11.00
700630	S022	50.00	70.00	12.00	13.00
700064	S022	53.00	63.00	6.50	7.50
700389	S022	55.00	65.00	10.00	11.00
700123	S022	55.00	65.00	12.00	13.00
700124	S022	55.00	70.00	12.00	13.00
700686	S022	55.00	75.00	12.00	13.00



Profile S022



WORKING CONDITIONS

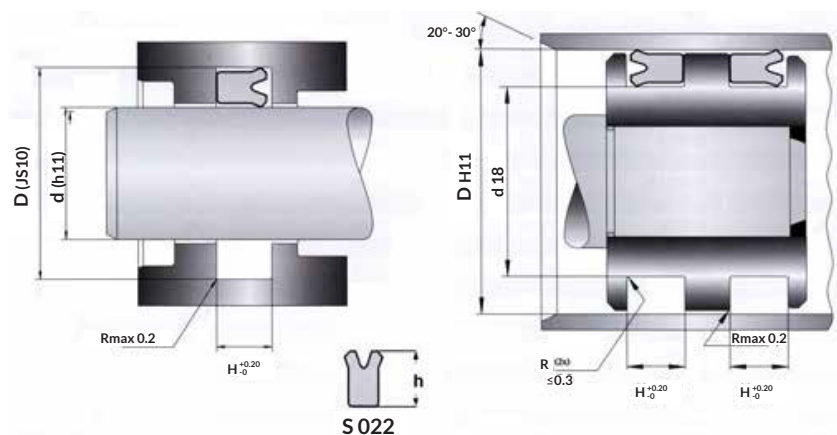
Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA

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700687	S022	60.00	70.00	10.00	11.00
700023	S022	60.00	70.00	12.00	13.00
700688	S022	60.00	75.00	12.00	13.00
700318	S022	60.00	80.00	10.00	11.00
700996	S022	60.00	80.00	12.00	13.00
700690	S022	65.00	75.00	12.00	13.00
700127	S022	65.00	80.00	12.00	13.00
700128	S022	65.00	85.00	12.00	13.00
700695	S022	70.00	80.00	5.00	6.00
700103	S022	70.00	80.00	12.00	13.00
700131	S022	70.00	85.00	12.00	13.00
700014	S022	75.00	90.00	12.00	13.00
700361	S022	75.00	90.00	7.50	8.50
700635	S022	75.00	90.00	12.00	13.00
700362	S022	80.00	95.00	12.00	13.00
700133	S022	80.00	90.00	10.00	11.00
700126	S022	80.00	95.00	12.00	13.00
700319	S022	80.00	100.00	10.00	11.00
700134	S022	85.00	100.00	12.00	13.00
700110	S022	90.00	100.00	12.00	13.00
700154	S022	90.00	100.00	8.00	9.00
700212	S022	90.00	100.00	12.00	13.00
700137	S022	90.00	105.00	12.00	13.00
700165	S022	90.00	110.00	12.00	13.00
700207	S022	95.00	110.00	12.00	13.00
700366	S022	95.00	115.00	12.00	13.00

Profile S022



WORKING CONDITIONS

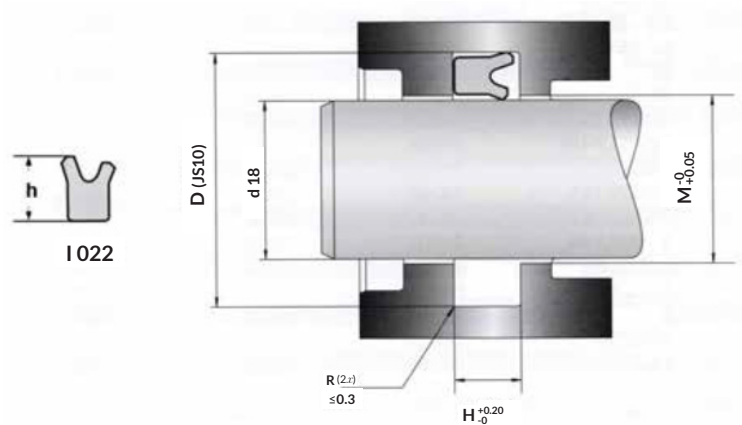
Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA

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700139	S022	100.00	115.00	12.00	13.00
700140	S022	100.00	120.00	12.00	13.00
700998	S022	100.00	125.00	12.00	13.00
700999	S022	100.00	125.00	15.00	16.00
700189	S022	105.00	120.00	15.00	16.00
700368	S022	105.00	125.00	15.00	16.00
701065	S022	110.00	125.00	12.00	13.00
700141	S022	110.00	125.00	15.00	16.00
700190	S022	110.00	130.00	15.00	16.00
700143	S022	120.00	140.00	15.00	16.00
701068	S022	125.00	140.00	15.00	16.00
700370	S022	125.00	145.00	15.00	16.00
700144	S022	130.00	150.00	15.00	16.00
700158	S022	140.00	160.00	15.00	16.00
700111	S022	145.00	165.00	15.00	16.00
700171	S022	150.00	170.00	15.00	16.00
700146	S022	160.00	180.00	15.00	16.00
700148	S022	170.00	190.00	15.00	16.00
700147	S022	180.00	200.00	15.00	16.00

Profile I022



WORKING CONDITIONS

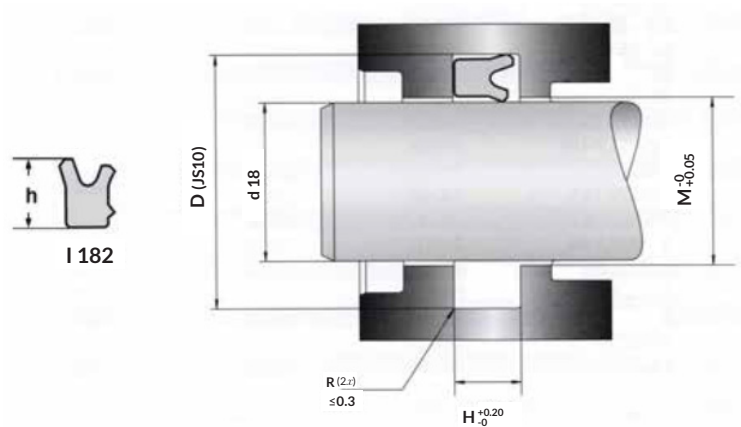
Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA

M SEALS NO.	M SEALS TYPE	d	D	h	H
314156	I022	6.00	14.00	5.70	6.30
314157	I022	8.00	16.00	5.70	6.30
314158	I022	10.00	18.00	5.70	6.30
314159	I022	12.00	20.00	5.70	6.30
314160	I022	12.00	22.00	7.30	8.00
314161	I022	14.00	21.00	5.00	5.80
314162	I022	14.00	22.00	5.70	6.30
314163	I022	16.00	26.00	7.30	8.00
314164	I022	18.00	28.00	7.30	8.00
314123	I022	20.00	26.00	5.00	5.50
314012	I022	20.00	28.00	5.70	6.30
314044	I022	22.00	32.00	7.30	8.00
314165	I022	25.00	35.00	7.30	8.00
314166	I022	28.00	36.00	5.70	6.30
314117	I022	28.00	38.00	7.30	8.00
314006	I022	32.00	42.00	7.30	8.00
314167	I022	36.00	44.00	5.70	6.30
314168	I022	36.00	46.00	7.30	8.00
314169	I022	40.00	55.00	11.50	12.50
314170	I022	45.00	53.00	5.70	6.30
314171	I022	45.00	60.00	11.50	12.50
700086	I022	50.00	65.00	11.50	12.50
314172	I022	100.00	120.00	15.00	16.00
314173	I022	110.00	130.00	15.00	16.00
314174	I022	125.00	145.00	15.00	16.00
314175	I022	140.00	160.00	15.00	16.00
314176	I022	160.00	185.00	18.50	20.00
314177	I022	200.00	225.00	18.50	20.00
314178	I022	280.00	310.00	23.00	25.00

Profile I182



WORKING CONDITIONS

Pressure: max. 400 bar
 Speed: max. 0.5 m/s
 Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA

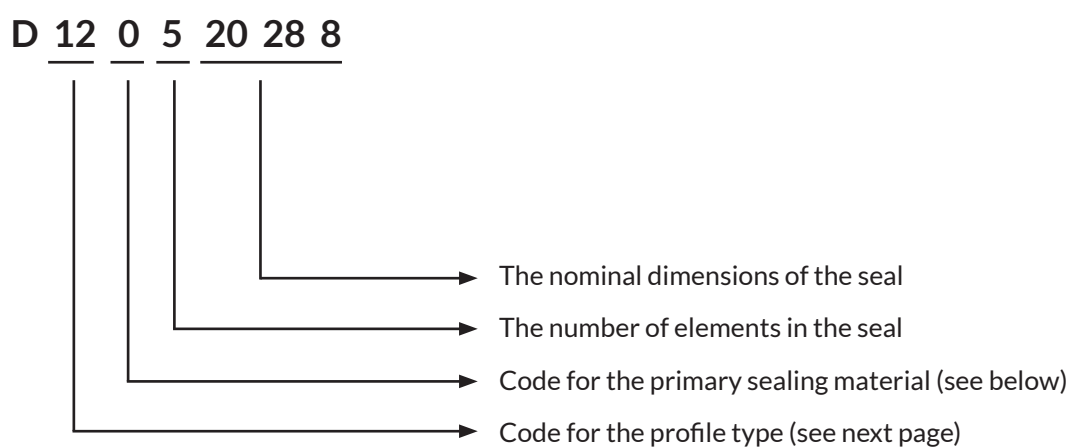
M SEALS NO.	M SEALS TYPE	d	D	h	H
314179	I182	14.00	24.00	7.30	8.00
314180	I182	16.00	24.00	5.70	6.30
314181	I182	20.00	30.00	7.30	8.00
314182	I182	22.00	30.00	5.70	6.30
314183	I182	25.00	33.00	5.70	6.30
314184	I182	40.00	50.00	7.30	8.00
314185	I182	45.00	55.00	7.30	8.00
314128	I182	50.00	60.00	7.30	8.00
314186	I182	56.00	71.00	11.40	12.50
314187	I182	63.00	78.00	11.50	12.50
314188	I182	70.00	85.00	11.50	12.50
314189	I182	80.00	95.00	11.50	12.50
314008	I182	90.00	105.00	11.50	12.50

Piston Seals - Double Acting

M SEALS PART NUMBERS

The part names consist of: 1 initial letter + 4 digits + the dimension of the seal.

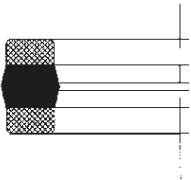
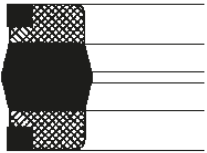
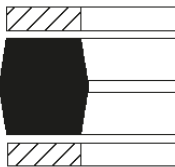
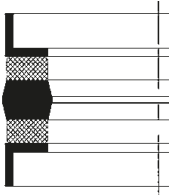
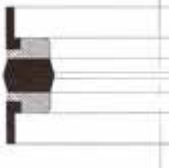
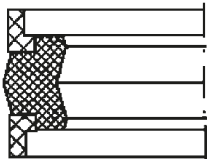
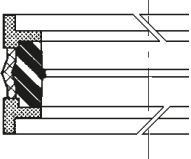
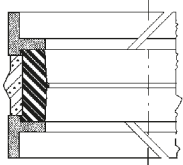
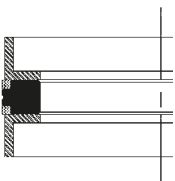
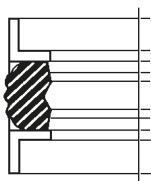
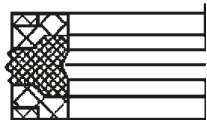
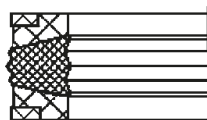
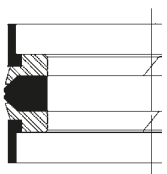
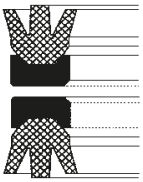
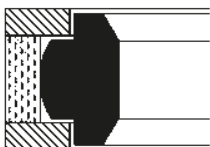
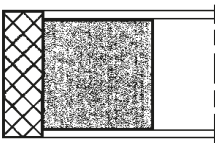
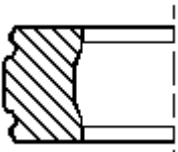
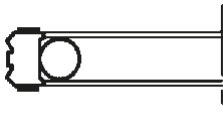
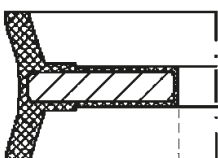
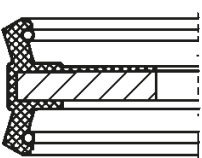
For example: **D1205 20 90 35**



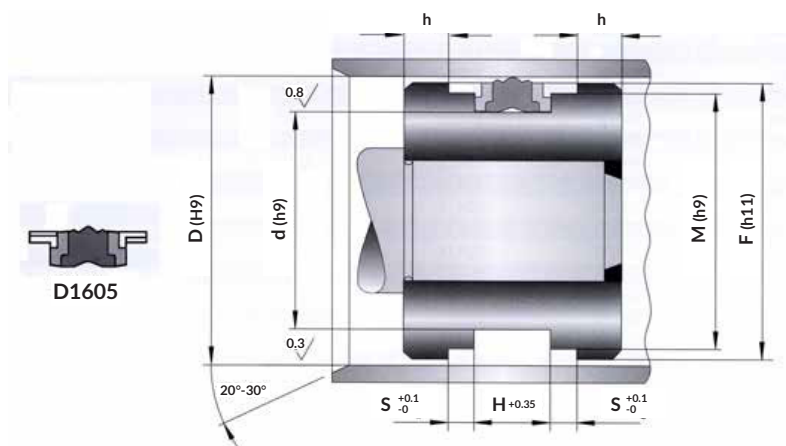
MATERIAL CODES

0 = NBR	7 = PA
1 = NBR/FABRIC	8 = FPM/FABRIC
2 = PU	9 = METAL
3 = FPM	A = CSM
4 = EPDM	B = EPDM/FABRIC
5 = PTFE	C = SIL
6 = CR	

Profile Types

D01X1 	D02X3 	D03X3 	D04X3 
D05X3 	D06X3 	D07X3 	D08X3 
D09X3 	D10X3 	D11X5 	D12X5 
D13X5 	D14X5 	D15X5 	D16X5 
D17X1 	D18X2 	D19X4 	D20X2 
D21X1 	D22X2 	D90X1 	D91X1 

Profile D1605



WORKING CONDITIONS

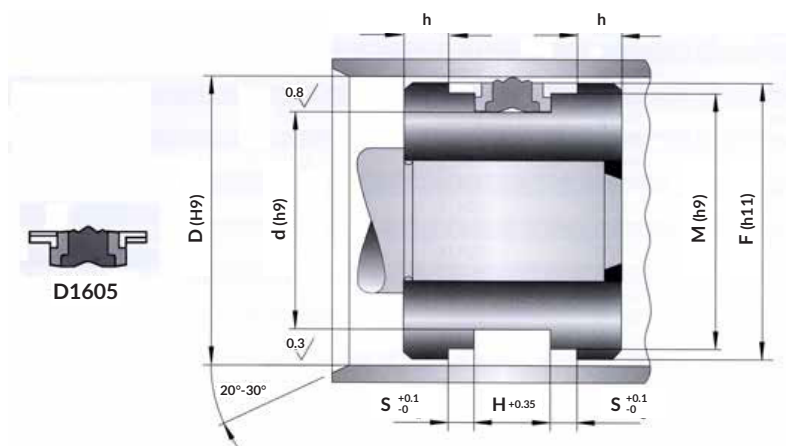
Pressure: max. 300 bar
 Speed: max. 0.5 m/s
 Temperature: -30°C to +110°C

MATERIAL

NBR + POM + Polyester

M SEALS NO.	M SEALS TYPE	D	d	H	S	M	F
802253	D1605	25.00	15.00	12.40	4.00	22.00	24.00
802541	D1605	32.00	24.00	10.00	4.00	29.00	31.00
802002	D1605	32.00	22.00	16.40	6.35	31.40	33.50
802003	D1605	35.00	25.00	16.40	6.35	28.50	30.50
802542	D1605	40.00	30.00	12.50	4.00	36.00	39.00
802083	D1605	40.00	32.00	15.50	3.20	36.00	39.40
802006	D1605	40.00	30.00	16.40	6.35	35.40	38.50
802004	D1605	40.00	24.00	18.40	6.35	35.40	38.70
802547	D1605	45.00	37.00	15.50	3.20	41.00	44.40
802130	D1605	50.00	40.00	12.50	4.00	47.00	49.00
802008	D1605	50.00	34.00	18.40	6.35	45.41	48.70
802131	D1605	55.00	39.00	18.40	6.35	50.37	53.65
802011	D1605	60.00	44.00	18.40	6.35	55.39	58.65
802170	D1605	60.00	48.00	20.50	4.20	56.00	59.40
802220	D1605	63.00	53.00	12.50	4.00	60.00	62.00
802013	D1605	63.00	47.00	18.40	6.35	58.39	61.63
802180	D1605	63.00	47.00	19.40	6.35	58.39	61.63
802200	D1605	63.00	51.00	20.50	4.20	59.00	62.40
802231	D1605	65.00	50.00	18.40	6.35	60.41	63.64
802543	D1605	70.00	55.00	20.00	5.00	66.00	68.50
802241	D1605	70.00	50.00	22.40	6.35	64.18	68.34
802250	D1605	75.00	22.40	22.40	6.35	69.18	73.32
802018	D1605	80.00	60.00	22.40	6.35	74.16	78.34

Profile D1605



WORKING CONDITIONS

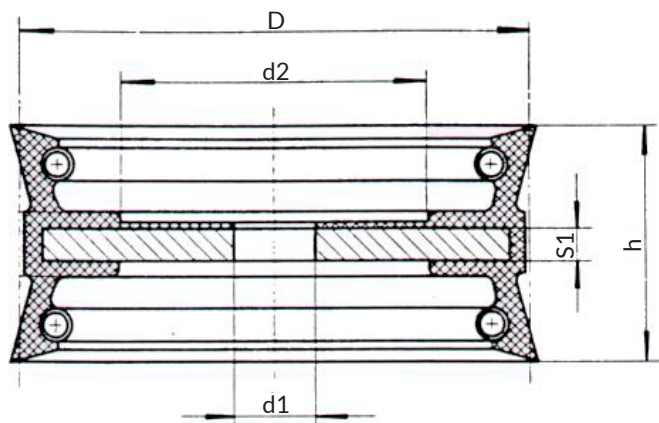
Pressure: max. 300 bar
 Speed: max. 0.5 m/s
 Temperature: -30°C to +110°C

MATERIAL

NBR + POM + Polyester

M SEALS NO.	M SEALS TYPE	D	d	H	S	M	F
802320	D1605	80.00	66.00	22.50	5.20	76.00	79.40
802325	D1605	85.00	65.00	22.40	6.35	79.16	83.34
802341	D1605	90.00	70.00	22.40	6.35	84.15	88.31
802360	D1605	90.00	76.00	22.50	5.20	86.00	89.40
802021	D1605	95.00	75.00	22.40	6.35	89.15	93.31
802390	D1605	100.00	85.00	20.00	5.00	96.00	98.50
802371	D1605	100.00	75.00	22.40	6.35	93.14	98.05
802256	D1605	100.00	86.00	22.50	5.20	96.00	99.40
802024	D1605	105.00	80.00	22.40	6.35	98.09	103.03
802016	D1605	110.00	85.00	22.40	6.35	103.10	108.00
802425	D1605	115.00	90.00	22.40	6.35	108.10	113.02
802435	D1605	120.00	95.00	22.40	6.35	113.10	118.02
802025	D1605	125.00	100.00	25.40	6.35	118.08	122.93
802460	D1605	125.00	105.00	25.40	6.35	119.10	123.30
802473	D1605	130.00	105.00	25.40	9.52	122.60	127.50
802484	D1605	140.00	115.00	25.40	9.52	132.60	137.50
802487	D1605	150.00	125.00	25.40	9.52	142.60	147.50
802033	D1605	160.00	130.00	25.40	9.52	152.60	157.50
802277	D1605	180.00	150.00	35.40	6.35	172.95	177.00
802544	D1605	200.00	170.00	35.40	6.35	193.00	198.00
802545	D1605	220.00	190.00	35.40	6.35	212.70	217.00
802488	D1605	250.00	220.00	35.40	6.35	242.90	247.00
802546	D1605	280.00	250.00	35.40	9.52	272.90	277.00

Profile D9101



WORKING CONDITIONS

Pressure: max. 40 bar (hydraulic)
max. 10 bar (pneumatic)

Temperature: -25°C to +100°C

MATERIAL

NBR (Other materials can be supplied on request)

Double acting piston seal with both low-pressure hydraulic and pneumatic – fitted with pressure springs to ensure optimal sealing.

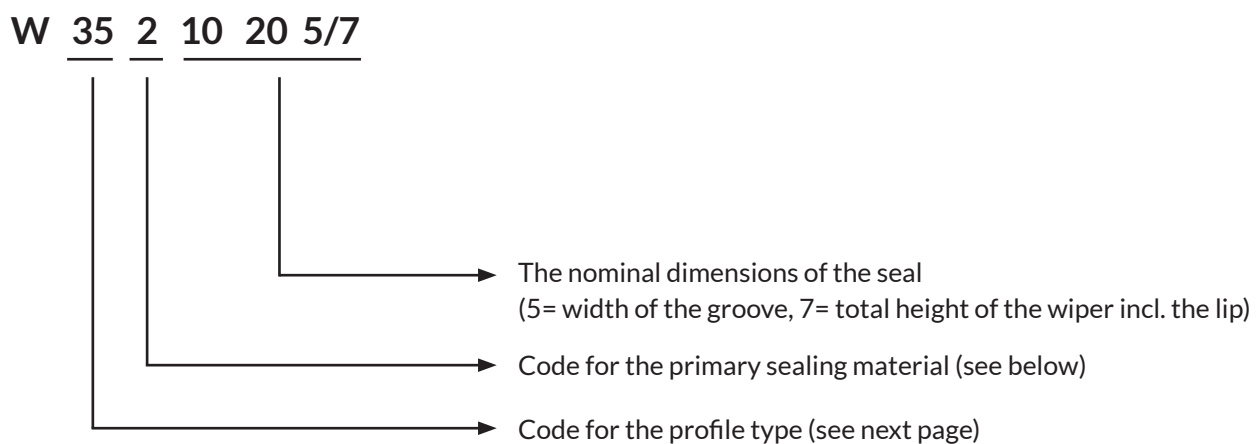
M SEALS TYPE	DIMENSIONS	D	d1	h	d2	S1
D9101	26 x 8 x 22	26	8.2	22	15	3
D9101	30 x 8 x 22	30	8.2	22	16	3
D9101	35 x 8 x 26	35	8.2	26	20	3
D9101	40 x 10 x 22	40	10.2	22	20	3
D9101	45 x 10 x 25	45	10.2	25	22	4
D9101	50 x 10 x 25	50	10.2	25	27	4
D9101	55 x 10 x 25	55	10.2	25	32	4
D9101	60 x 12 x 26	60	12.2	26	37	4
D9101	63 x 12 x 25	63	12.2	25	40	4
D9101	70 x 12 x 30	70	12.2	30	44	5
D9101	80 x 12 x 30	80	12.2	30	54	5
D9101	100 x 12 x 35	100	12.2	35	72	6
D9101	110 x 12 x 40	110	12.2	40	78	6
D9101	115 x 20 x 30	115	20.2	30	83	8
D9101	125 x 20 x 40	125	20.2	40	85	8
D9101	140 x 20 x 40	140	20.2	40	100	9
D9101	150 x 20 x 40	150	20.2	40	105	10
D9101	160 x 20 x 40	160	20.2	40	115	10
D9101	180 x 20 x 40	180	20.2	40	130	10
D9101	200 x 20 x 40	200	20.2	40	145	10
D9101	250 x 30 x 40	250	30.2	40	200	12
D9101	300 x 35 x 40	300	35.2	40	250	12

Wiper Seals/Scraper Seals

M SEALS PART NUMBERS

The part names consist of: 1 initial letter + 3 digits + the nominal dimensions of the wiper seal.

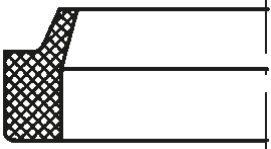
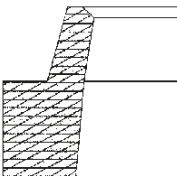
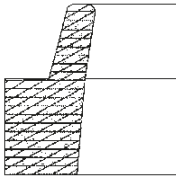
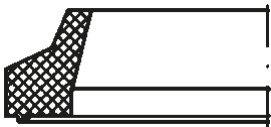
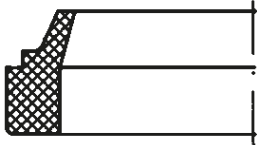
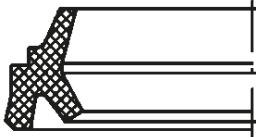
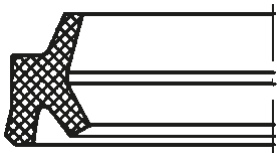
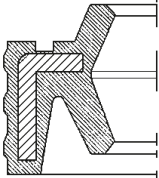
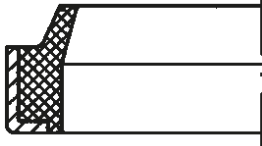
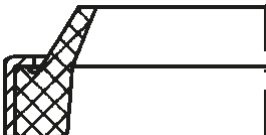
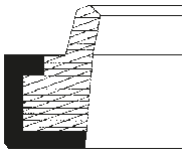
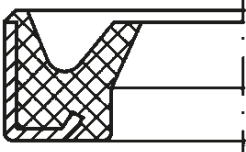
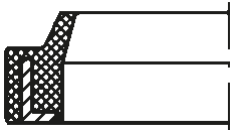
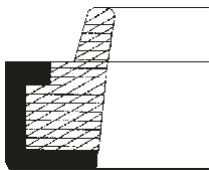
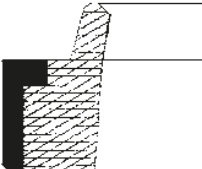
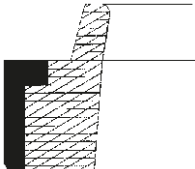
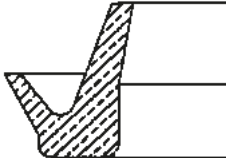
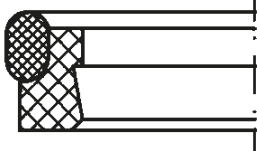
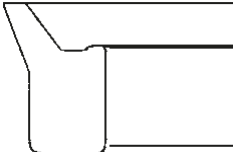
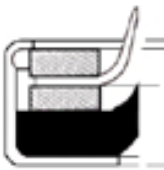
For example: **W 352 10 20 5/7**



MATERIAL CODES

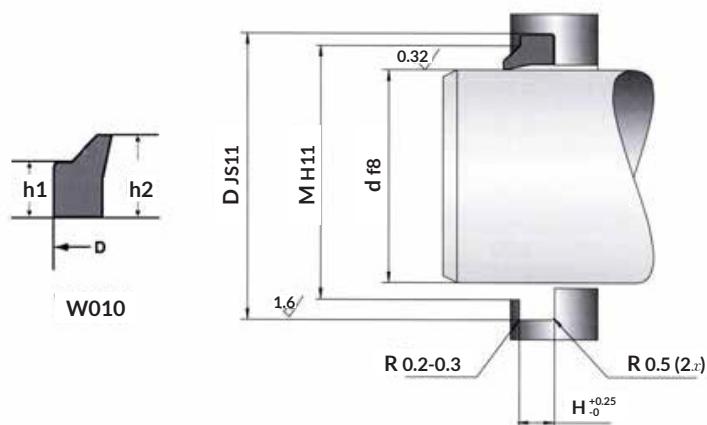
0 = NBR	7 = PA
1 = NBR/FABRIC	8 = FPM/FABRIC
2 = PU	9 = METAL
3 = FPM	A = CSM
4 = EPDM	B = EPDM/FABRIC
5 = PTFE	C = SIL
6 = CR	

Profile Types

W01 	W02 	W03 	W04 
W05 	W07 		
W10 	W11 	W20 	W21 
W22 	W23 	W30 	W32 
W33 	W34 	W35 	W36 
W37 	W38 	W40 	W50 
W60 	W70 		



Profile W010



WORKING CONDITIONS

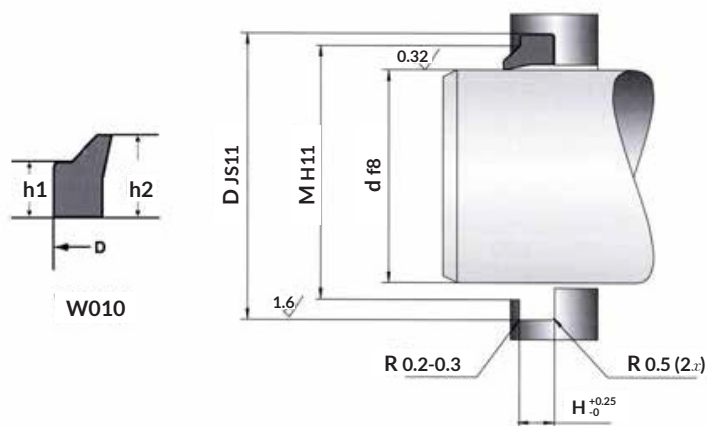
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA

M SEALS NO.	M SEALS TYPE	d	D	h1/h2	D1	M	H
300413	W010	3.00	6.00	2 / 2.75	6.00	4.50	2.50
300415	W010	6.00	9.00	2 / 2.75	9.00	7.50	2.50
300543	W010	10.00	13.00	2 / 2.75	10.00	11.50	2.50
300416	W010	12.00	16.00	2.9 / 3.9	12.00	14.00	3.20
300142	W010	12.00	18.00	3.5 / 5	18.60	15.00	3.80
300144	W010	13.00	19.00	3.5 / 5	19.60	16.00	3.80
300417	W010	14.00	18.00	2.9 / 3.9	18.00	16.00	3.20
303372	W010	14.00	20.00	3.4 / 5.5	20.60	17.00	3.80
303145	W010	14.00	21.00	3.5 / 5	21.60	18.00	3.80
303147	W010	15.00	21.00	3.5 / 5	21.60	18.00	3.80
303148	W010	16.00	22.00	3.5 / 5	22.60	19.00	3.80
303150	W010	17.00	23.00	3.5 / 5	23.60	20.00	3.80
300432	W010	18.00	22.00	2.9 / 3.9	22.00	20.00	3.20
303371	W010	18.00	24.00	3.5 / 5	24.60	21.00	3.80
303153	W010	19.00	28.00	5 / 7	28.60	22.00	5.30
303155	W010	20.00	28.00	5 / 7	28.60	23.00	5.30
300418	W010	22.00	26.00	2.9 / 3.9	26.00	24.00	3.20
303157	W010	22.00	30.00	5 / 7	30.60	25.00	5.30
303158	W010	24.00	32.00	5 / 7	32.60	27.00	5.30
303160	W010	25.00	33.00	5 / 7	33.60	28.00	5.30
303161	W010	26.00	34.00	5 / 7	34.60	29.00	5.30
303162	W010	27.00	35.00	5 / 7	35.60	30.00	5.30
303164	W010	28.00	36.00	5 / 7	36.60	31.00	5.30
303166	W010	30.00	38.00	5 / 7	38.60	33.00	5.30
303168	W010	32.00	40.00	5 / 7	40.60	35.00	5.30
303169	W010	33.00	41.00	5 / 7	41.60	36.00	5.30
303202	W010	35.00	43.00	5 / 7	43.60	38.00	5.30
303173	W010	36.00	44.00	5 / 7	44.60	39.00	5.30
303174	W010	38.00	46.00	5 / 7	46.60	41.00	5.30
303176	W010	40.00	48.00	5 / 7	48.50	43.00	5.30

Profile W010



WORKING CONDITIONS

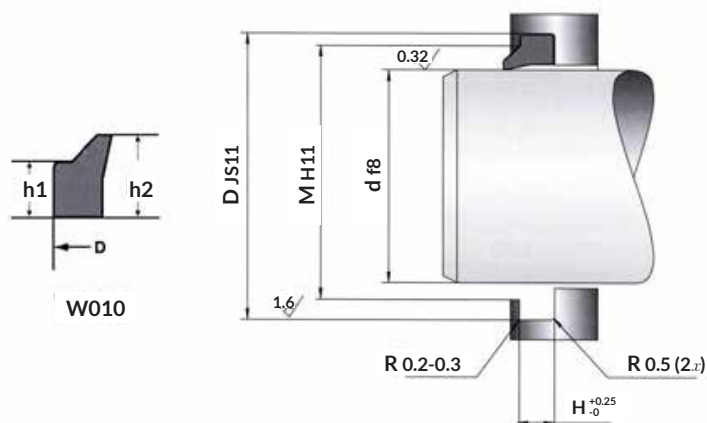
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA

M SEALS NO.	M SEALS TYPE	d	D	h1/h2	D1	M	H
303178	W010	42.00	50.00	5 / 7	50.60	45.00	5.30
303180	W010	45.00	53.00	5 / 7	53.60	48.00	5.30
303181	W010	45.00	55.00	5 / 7	55.60	49.00	5.30
303182	W010	46.00	54.00	5 / 7	54.60	49.00	5.30
303183	W010	48.00	56.00	5 / 7	56.60	51.00	5.30
303185	W010	50.00	58.00	5 / 7	58.60	53.00	5.30
303261	W010	50.00	60.00	5 / 7	60.60	54.00	5.30
303187	W010	53.00	61.00	5 / 7	61.60	56.00	5.30
303189	W010	55.00	63.00	5 / 7	63.60	58.00	5.30
303015	W010	55.00	65.00	5 / 7	65.60	59.00	5.30
303192	W010	56.00	64.00	5 / 7	64.60	59.00	5.30
303193	W010	56.00	66.00	5 / 7	66.60	59.00	5.30
303195	W010	60.00	68.00	5 / 7	68.60	63.00	5.30
303196	W010	60.00	70.00	5 / 7	70.60	63.00	5.30
303198	W010	63.00	71.00	5 / 7	71.60	66.00	5.30
303199	W010	63.00	73.00	5 / 7	73.60	66.00	5.30
303200	W010	65.00	73.00	5 / 7	73.60	68.00	5.30
303201	W010	65.00	75.00	5 / 7	75.60	69.00	5.30
303203	W010	70.00	78.00	5 / 7	78.60	73.00	5.30
303204	W010	70.00	80.00	5 / 7	80.60	73.00	5.30
303205	W010	70.00	82.00	7 / 12	82.60	76.00	7.10
303206	W010	73.00	81.00	5 / 7	81.60	76.00	5.30
303207	W010	75.00	83.00	5 / 7	83.60	78.00	5.30
303208	W010	75.00	87.00	7 / 12	87.20	81.00	7.10
303209	W010	78.00	92.00	7 / 12	92.20	85.00	7.10
303211	W010	80.00	88.00	5 / 7	88.60	83.00	5.30
303212	W010	80.00	92.00	7 / 12	92.20	86.00	7.10

Profile W010



WORKING CONDITIONS

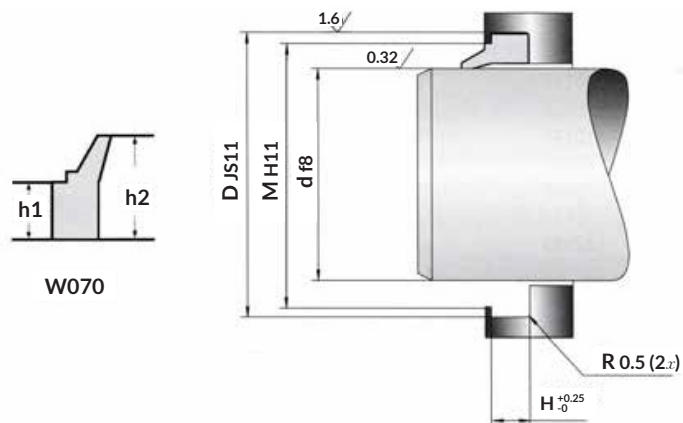
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA

M SEALS NO.	M SEALS TYPE	d	D	h1/h2	D1	M	H
303213	W010	83.00	91.00	5 / 7	91.60	86.00	5.30
303214	W010	85.00	93.00	5 / 7	93.60	88.00	5.30
303215	W010	85.00	97.00	7 / 12	97.20	91.00	7.10
303216	W010	88.00	100.00	7 / 12	100.20	94.00	7.10
303218	W010	90.00	102.00	7 / 12	102.20	96.00	7.10
303219	W010	95.00	107.00	7 / 12	107.20	101.00	7.10
303221	W010	100.00	112.00	7 / 12	112.20	106.00	7.10
303000	W010	105.00	117.00	7 / 12	117.20	111.00	7.10
303223	W010	110.00	122.00	7 / 12	122.20	116.00	7.10
303224	W010	115.00	127.00	7 / 12	127.20	121.00	7.10
303251	W010	120.00	132.00	7 / 12	132.20	126.00	7.10
303226	W010	125.00	140.00	10 / 16	140.20	132.60	10.10
303257	W010	130.00	142.00	7 / 12	142.20	136.00	7.10
303082	W010	140.00	152.00	7 / 12	152.20	146.00	7.10
303228	W010	140.00	155.00	10 / 16	155.20	147.00	10.10
303252	W010	145.00	157.00	7 / 12	157.20	151.00	7.10
303229	W010	150.00	165.00	10 / 16	165.20	157.60	10.10
303231	W010	160.00	175.00	10 / 16	175.20	168.00	10.10
303258	W010	170.00	185.00	10 / 16	185.20	178.00	10.10
303255	W010	180.00	195.00	10 / 16	195.20	188.00	10.10
303233	W010	190.00	200.00	10 / 16	200.20	190.00	10.10

Profile W070



WORKING CONDITIONS

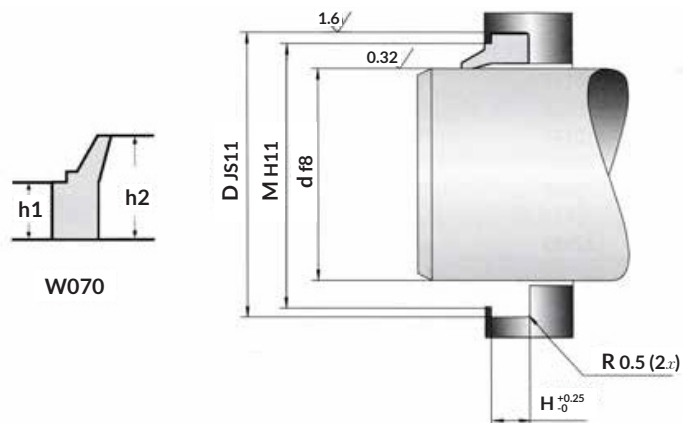
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA

M SEALS NO.	M SEALS TYPE	d	D	h1/h2	M	H
303012	W070	5	8	2.2 / 4	7	2.2
303017	W070	8	16	4 / 7	14	4.15
303007	W070	10	18	4 / 7	16	4.15
303143	W070	12	20	4 / 7	18	4.15
303146	W070	14	22	4 / 7	20	4.15
303019	W070	15	23	4	21	4.15
303014	W070	16	24	4 / 7	22	4.15
303020	W070	17	25	4	23	4.15
303269	W070	18	24	3.1	22	3.1
303152	W070	18	26	4 / 7	24	4.15
303154	W070	20	28	4 / 7	26	4.15
303156	W070	22	30	4 / 7	28	4.15
303021	W070	23	31	4	29	4.15
303022	W070	24	32	4	30	4.15
303008	W070	25	33	4 / 7	31	4.15
303159	W070	26	34	4	32	4.15
303163	W070	28	36	4 / 7	34	4.15
303005	W070	30	38	4 / 7	36	4.15
303167	W070	32	40	4 / 7	38	4.15
303023	W070	33	41	4	39	4.15
303170	W070	35	43	4 / 7	41	4.15
303172	W070	36	44	4 / 7	42	4.15
303025	W070	38	46	4 / 7	44	4.15
303175	W070	40	48	4 / 7	46	4.15
303177	W070	42	50	4 / 7	48	4.15
303026	W070	44	52	4 / 7	50	4.15
303179	W070	45	53	4 / 7	51	4.15

Profile W070



WORKING CONDITIONS

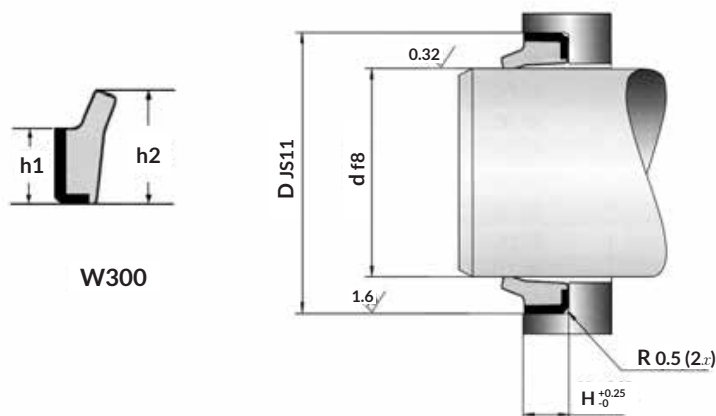
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA

M SEALS NO.	M SEALS TYPE	d	D	h1/h2	M	H
303184	W070	50	58	4 / 7	56	4.15
303188	W070	55	63	4 / 7	61	4.15
303191	W070	56	64	4 / 7	62	4.15
303194	W070	60	68	4 / 7	66	4.15
303197	W070	63	71	4 / 7	69	4.15
303013	W070	70	78	4 / 7	76	4.15
303260	W070	75	83	4 / 7	81	4.15
303210	W070	80	88	4 / 7	86	4.15
303217	W070	90	98	4 / 7	96	4.15
303249	W070	95	103	4 / 7	101	4.15
303220	W070	100	108	4 / 7	106	4.15
303237	W070	110	122	5.5 / 10	119	5.65
303225	W070	120	132	5.5 / 10	129	5.65
303238	W070	125	137	5.5 / 10	134	5.65
303006	W070	130	142	5.5 / 10	140	5.65
303239	W070	140	152	5.5 / 10	149	5.65
303048	W070	150	162	5.5 / 10	160	5.65
303240	W070	160	172	5.5 / 10	169	5.65
303241	W070	180	192	5.5 / 10	189	5.65
303242	W070	200	212	5.5 / 10	209	5.65
303243	W070	220	235	6.5 / 13	231	6.65
303244	W070	250	265	6.5 / 13	261	6.65

Profile W300



WORKING CONDITIONS

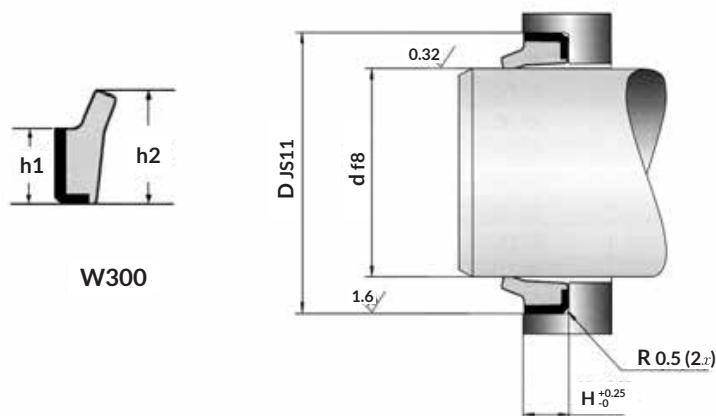
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA + Steel

M SEALS NO.	M SEALS TYPE	d	D	h1+ H / h2
302015	W300	10	16	3 / 4.5
302006	W300	10	20	5 / 8
302008	W300	12	20	4 / 6
302010	W300	12	22	5 / 8
302011	W300	14	19.8	3 / 4.5
302013	W300	14	22	3 / 4
302017	W300	16	22	3 / 4
302021	W300	16	26	5 / 8
302024	W300	18	28	5 / 8
302027	W300	18	32	5 / 9
302125	W300	20	28	3.5 / 5
302029	W300	20	30	4 / 6
302031	W300	20	30	5 / 8
302033	W300	20	30	7 / 10
302034	W300	20	35	7 / 10
302035	W300	22	28	5 / 9
302037	W300	22	32	5 / 7
302043	W300	22	32	7 / 10
302137	W300	22	35	5 / 8
302041	W300	24	32	5 / 7
302042	W300	25	35	5 / 8
302044	W300	25	35	7 / 10
302073	W300	28	38	5 / 8
302050	W300	28	40	7 / 10
302052	W300	30	40	5 / 8
302054	W300	30	40	7 / 10
302023	W300	30	45	5 / 8
302055	W300	32	40	4 / 7
302057	W300	32	42	5 / 7
302058	W300	32	42	7 / 10

Profile W300



WORKING CONDITIONS

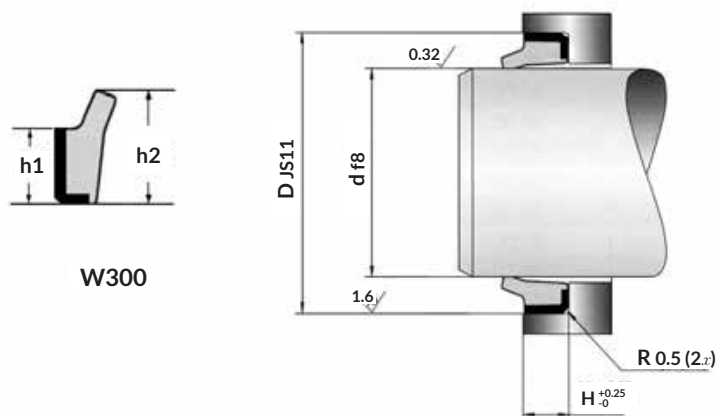
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA + Steel

M SEALS NO.097	M SEALS TYPE	d	D	h1+ H/h2
302059	W300	32	45	4 / 8
302060	W300	32	45	5 / 7
302056	W300	32	45	7 / 10
302063	W300	35	45	5 / 8
302065	W300	35	45	7 / 10
302127	W300	35	47	7 / 10
302066	W300	35	52	7 / 10
302068	W300	36	45	7 / 10
302072	W300	40	50	5 / 8
302074	W300	40	50	7 / 10
302167	W300	40	52	7 / 10
302077	W300	42	52	7 / 10
302169	W300	44	55	5 / 8
302080	W300	45	55	7 / 10
302071	W300	45	60	7 / 10
302083	W300	48	60	7 / 10
302085	W300	50	56	5 / 8
302087	W300	50	60	5 / 8
302089	W300	50	60	7 / 10
302090	W300	50	65	5 / 8
302172	W300	50	65	7 / 10
302092	W300	52	62	7 / 10
302093	W300	55	63	7 / 10
302096	W300	55	65	7 / 10
302097	W300	56	65	7 / 10
302129	W300	56	66	7 / 10
302180	W300	60	70	7 / 10
302001	W300	60	74	5 / 8
302000	W300	60	75	7 / 10
302103	W300	63	75	7 / 10

Profile W300



WORKING CONDITIONS

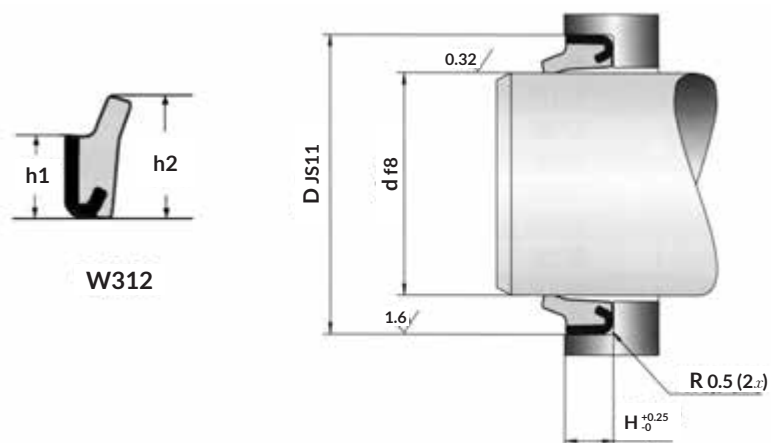
Temperature: -30°C to +90°C

MATERIAL

NBR 90° ShA + Steel

M SEALS NO.	M SEALS TYPE	d	D	h1+ H/h2
302106	W300	65	75	7 / 10
302109	W300	70	80	7 / 10
302181	W300	75	85	7 / 10
302113	W300	75	87	5 / 7
302114	W300	78	88	7 / 10
302117	W300	80	90	7 / 10
302119	W300	85	95	7 / 10
302182	W300	90	100	7 / 10
302124	W300	95	105	7 / 10
302126	W300	100	110	7 / 10
302161	W300	100	115	8 / 10
302183	W300	105	115	7 / 10
302130	W300	110	120	7 / 10
302132	W300	115	125	7 / 10
302184	W300	120	130	7 / 10
302136	W300	125	140	9 / 12
302138	W300	130	145	9 / 12
302185	W300	135	145	7 / 10
302139	W300	140	150	7 / 10
302141	W300	140	155	9 / 12
302170	W300	145	160	9 / 12
302143	W300	150	165	9 / 12
302145	W300	160	175	9 / 12
302147	W300	170	185	10 / 14
302149	W300	180	195	10 / 14
302151	W300	200	220	12 / 16
302152	W300	210	230	12 / 16
302164	W300	220	240	12 / 16
302154	W300	320	340	12 / 16
302155	W300	360	380	15 / 18

Profile W312



WORKING CONDITIONS

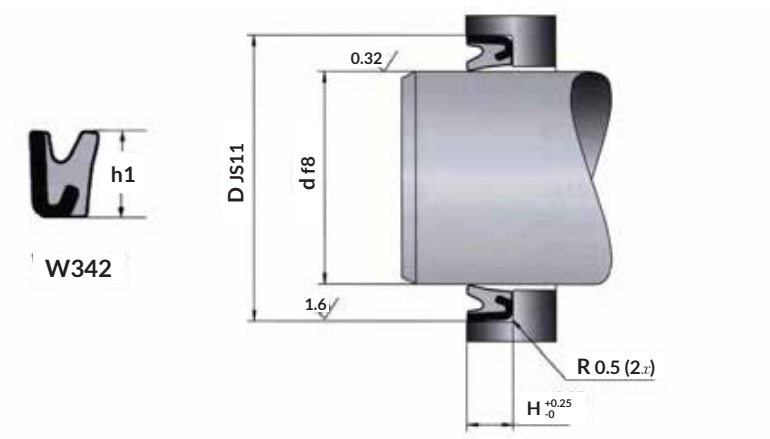
Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA + Steel

M SEALS NO.	M SEALS TYPE	d	D	h1+ H /h2
320060	W312	20.00	30.00	7 / 10
320061	W312	25.00	35.00	7 / 10
320062	W312	30.00	40.00	7 / 10
320063	W312	32.00	42.00	7 / 10
320064	W312	35.00	45.00	7 / 10
320065	W312	40.00	50.00	7 / 10
320066	W312	45.00	55.00	7 / 10
320067	W312	50.00	60.00	7 / 10
320068	W312	60.00	70.00	7 / 10
320069	W312	65.00	75.00	7 / 10
320070	W312	75.00	85.00	7 / 10
320071	W312	80.00	90.00	7 / 10
320072	W312	85.00	95.00	7 / 10
320073	W312	90.00	100.00	7 / 10
320074	W312	100.00	110.00	7 / 10

Profile W342



WORKING CONDITIONS

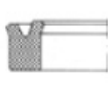
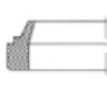
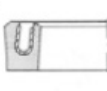
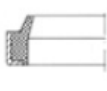
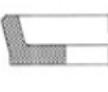
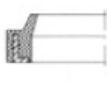
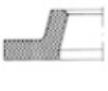
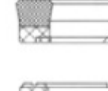
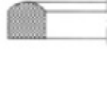
Temperature: -40°C to +110°C

MATERIAL

Polyurethane 91° ShA + Steel

M SEALS NO.	M SEALS TYPE	d	D	H
320075	W342	25.00	35.00	7.00
320076	W342	36.00	46.00	7.00
305042	W342	50.00	60.00	7.00
320077	W342	60.00	70.00	7.00
320078	W342	70.00	80.00	7.00
320079	W342	80.00	90.00	7.00
320080	W342	90.00	100.00	7.00
320081	W342	100.00	110.00	7.00



	Type A+AI		Type BP		E01-02		W07		M Flex™ E90
	Type B+BI		Type DR		I01-02		W30		M Guide™
	Type C+CI		BD		E41		W35		DO
	Type AE		OR		I41		W20		DOC
	Type AS+ASI		X		S50		W10		CIRCLIP J
	Type BS+BSI		VA		I52		W34		CIRCLIP A
	Type CS+CSI		VS		S64-66		M Wipe™ W50		UNP UNION
	Type ADUO		VE		D16		M Step™ I70		UNP CLAMP
	Type AUF		VL		D91		M Glide™ D80		
	Type BUF		VRB		D90		M Turn™ D74		
	Type ATS		S01-02		W01		M Flex™ I99		

Small things make **GREAT** things possible